

WT

10519835.trn

## Connecting via Winsock to STN

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LOGINID : SSSPTA1626GMS

**PASSWORD :**

TERMINAL (ENTER 1, 2, 3, OR ?):2

NEWS 1	Web Page for STN Seminar Schedule - N. America	
NEWS 2	JAN 08	CHEMLIST enhanced with New Zealand Inventory of Chemicals
NEWS 3	JAN 16	CA/CAplus Company Name Thesaurus enhanced and reloaded
NEWS 4	JAN 16	IPC version 2007.01 thesaurus available on STN
NEWS 5	JAN 16	WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
NEWS 6	JAN 22	CA/CAplus updated with revised CAS roles
NEWS 7	JAN 22	CA/CAplus enhanced with patent applications from India
NEWS 8	JAN 29	PHAR reloaded with new search and display fields
NEWS 9	JAN 29	CAS Registry Number crossover limit increased to 300,000 in multiple databases
NEWS 10	FEB 15	PATDPASPC enhanced with Drug Approval numbers
NEWS 11	FEB 15	RUSSIAPAT enhanced with pre-1994 records
NEWS 12	FEB 23	KOREAPAT enhanced with IPC 8 features and functionality
NEWS 13	FEB 26	MEDLINE reloaded with enhancements
NEWS 14	FEB 26	EMBASE enhanced with Clinical Trial Number field
NEWS 15	FEB 26	TOXCENTER enhanced with reloaded MEDLINE
NEWS 16	FEB 26	IFICDB/IFIPAT/IFIUDB reloaded with enhancements
NEWS 17	FEB 26	CAS Registry Number crossover limit increased from 10,000 to 300,000 in multiple databases
NEWS 18	MAR 15	WPIDS/WPIX enhanced with new FRAGHITSTR display format
NEWS 19	MAR 16	CASREACT coverage extended
NEWS 20	MAR 20	MARPAT now updated daily
NEWS 21	MAR 22	LWPI reloaded
NEWS 22	MAR 30	RDISCLOSURE reloaded with enhancements
NEWS 23	APR 02	JICST-EPLUS removed from database clusters and STN
NEWS 24	APR 30	GENBANK reloaded and enhanced with Genome Project ID field
NEWS 25	APR 30	CHEMCATS enhanced with 1.2 million new records
NEWS 26	APR 30	CA/CAplus enhanced with 1870-1889 U.S. patent records
NEWS 27	APR 30	INPADOC replaced by INPADOCDB on STN
NEWS 28	MAY 01	New CAS web site launched
NEWS 29	MAY 08	CA/CAplus Indian patent publication number format defined
NEWS 30	MAY 14	RDISCLOSURE on STN Easy enhanced with new search and display fields
NEWS EXPRESS	NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.	
NEWS HOURS	STN Operating Hours Plus Help Desk Availability	
NEWS LOGIN	Welcome Banner and News Items	
NEWS IPC8	For general information regarding STN implementation of IPC 8	

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 10:58:33 ON 18 MAY 2007

=>  
Uploading

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE  
Do you want to switch to the Registry File?

Choice (Y/n):

## Switching to the Registry File...

Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

## => FILE REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 10:58:47 ON 18 MAY 2007  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 17 MAY 2007 HIGHEST RN 935249-87-9  
DICTIONARY FILE UPDATES: 17 MAY 2007 HIGHEST RN 935249-87-9

New CAS Information Use Policies. Enter HELP USAGETERMS for details.

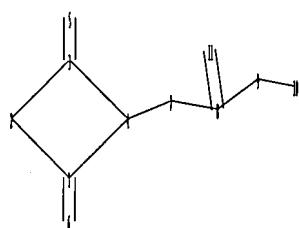
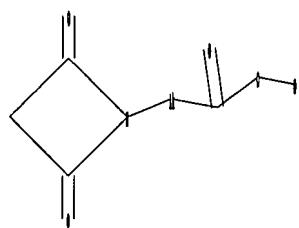
TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stn/gen/stndoc/properties.html>

=>  
Uploading C:\Program Files\Stnexp\Queries\10519835.str

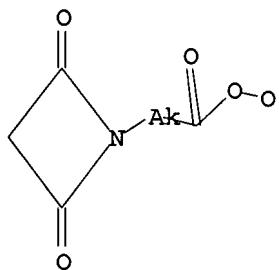


chain nodes :  
 5 6 7 8 9 10 11  
 ring nodes :  
 1 2 3 4  
 chain bonds :  
 1-6 3-5 4-7 7-8 8-9 8-11 9-10  
 ring bonds :  
 1-2 1-4 2-3 3-4  
 exact/norm bonds :  
 1-2 1-4 1-6 2-3 3-4 3-5 4-7 7-8 8-9 8-11  
 exact bonds :  
 9-10  
 isolated ring systems :  
 containing 1 :

Match level :  
 1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS  
 10:CLASS 11:CLASS

L1 STRUCTURE UPLOADED

=> d 11  
 L1 HAS NO ANSWERS  
 L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11  
 SAMPLE SEARCH INITIATED 10:59:11 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE  
 100.0% PROCESSED 0 ITERATIONS 0 ANSWERS

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SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 0 TO 0  
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

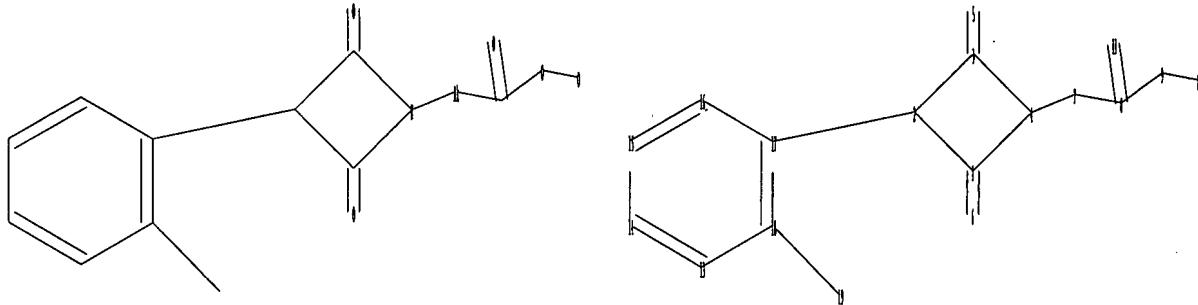
=> s 11 sss full  
FULL SEARCH INITIATED 10:59:18 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED 1 ITERATIONS  
SEARCH TIME: 00.00.01

0 ANSWERS

L3 0 SEA SSS FUL L1

=>  
Uploading C:\Program Files\Stnexp\Queries\10519835a.str



chain nodes :  
5 6 7 8 9 10 11 19  
ring nodes :  
1 2 3 4 13 14 15 16 17 18  
chain bonds :  
1-6 2-17 3-5 4-7 7-8 8-9 8-11 9-10 18-19  
ring bonds :  
1-2 1-4 2-3 3-4 13-14 13-18 14-15 15-16 16-17 17-18  
exact/norm bonds :  
1-2 1-4 1-6 2-3 3-4 3-5 4-7 7-8 8-9 8-11  
exact bonds :  
2-17 9-10 18-19  
normalized bonds :  
13-14 13-18 14-15 15-16 16-17 17-18  
isolated ring systems :  
containing 1 :

Match level :  
1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS  
10:CLASS 11:CLASS 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS

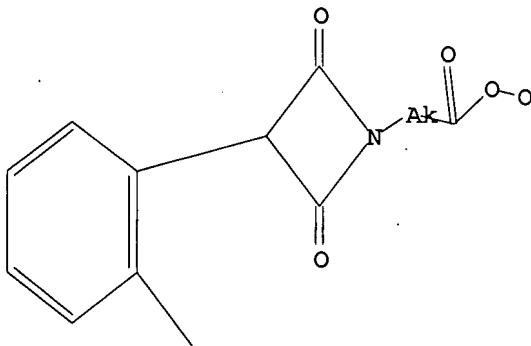
L4 STRUCTURE UPLOADED

=> d 14

10519835.trn

L4 HAS NO ANSWERS

L4 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 14

SAMPLE SEARCH INITIATED 11:02:05 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED  
SEARCH TIME: 00.00.01

1 ITERATIONS

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 1 TO 80  
PROJECTED ANSWERS: 0 TO 0

L5 0 SEA SSS SAM L4

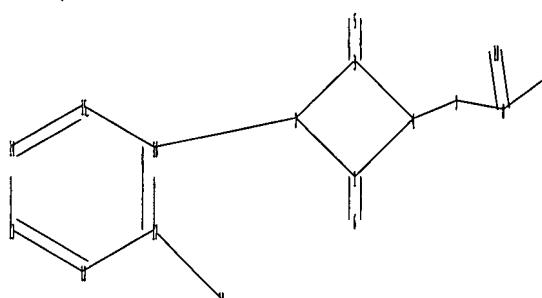
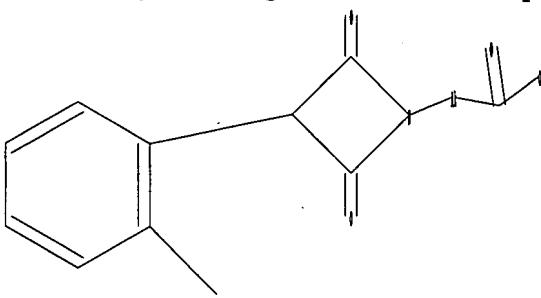
=> s 14 sss full  
FULL SEARCH INITIATED 11:02:11 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 5 TO ITERATE

100.0% PROCESSED  
SEARCH TIME: 00.00.01

0 ANSWERS

L6 0 SEA SSS FUL L4

=>  
Uploading C:\Program Files\Stnexp\Queries\10519835b.str



chain nodes :  
5 6 7 8 9 10 18  
ring nodes :

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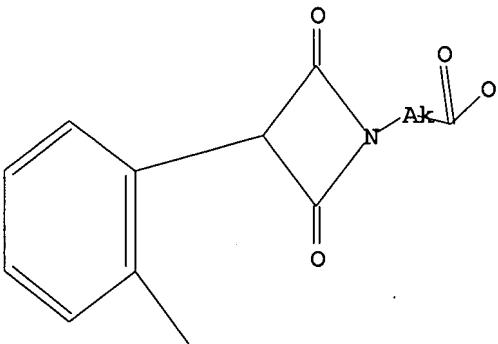
1 2 3 4 12 13 14 15 16 17  
chain bonds :  
1-6 2-16 3-5 4-7 7-8 8-9 8-10 17-18  
ring bonds :  
1-2 1-4 2-3 3-4 12-13 12-17 13-14 14-15 15-16 16-17  
exact/norm bonds :  
1-2 1-4 1-6 2-3 3-4 3-5 4-7 7-8 8-9 8-10  
exact bonds :  
2-16 17-18  
normalized bonds :  
12-13 12-17 13-14 14-15 15-16 16-17  
isolated ring systems :  
containing 1 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS  
10:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS

L7 STRUCTURE UPLOADED

=> d 17  
L7 HAS NO ANSWERS  
L7 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 17  
SAMPLE SEARCH INITIATED 11:03:26 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 29 TO ITERATE

100.0% PROCESSED 29 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 257 TO 903  
PROJECTED ANSWERS: 0 TO 0

L8 0 SEA SSS SAM L7

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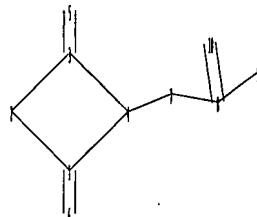
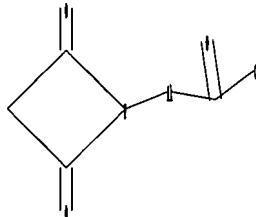
=> s 17 sss full  
FULL SEARCH INITIATED 11:03:34 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 637 TO ITERATE

100.0% PROCESSED 637 ITERATIONS  
SEARCH TIME: 00.00.01

0 ANSWERS

L9 0 SEA SSS FUL L7

=>  
Uploading C:\Program Files\Stnexp\Queries\10519835c.str

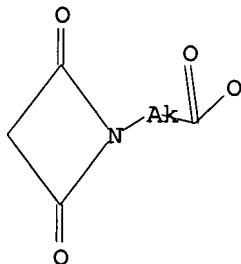


chain nodes :  
5 6 7 8 9 10  
ring nodes :  
1 2 3 4  
chain bonds :  
1-6 3-5 4-7 7-8 8-9 8-10  
ring bonds :  
1-2 1-4 2-3 3-4  
exact/norm bonds :  
1-2 1-4 1-6 2-3 3-4 3-5 4-7 7-8 8-9 8-10  
isolated ring systems :  
containing 1 :

Match level :  
1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS  
10:CLASS

L10 STRUCTURE UPLOADED

=> d 110  
L10 HAS NO ANSWERS  
L10 STR



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Structure attributes must be viewed using STN Express query preparation.

=> s l10

SAMPLE SEARCH INITIATED 11:05:17 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 351 TO ITERATE

100.0% PROCESSED 351 ITERATIONS  
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 5896 TO 8144  
PROJECTED ANSWERS: 0 TO 0

L11 0 SEA SSS SAM L10

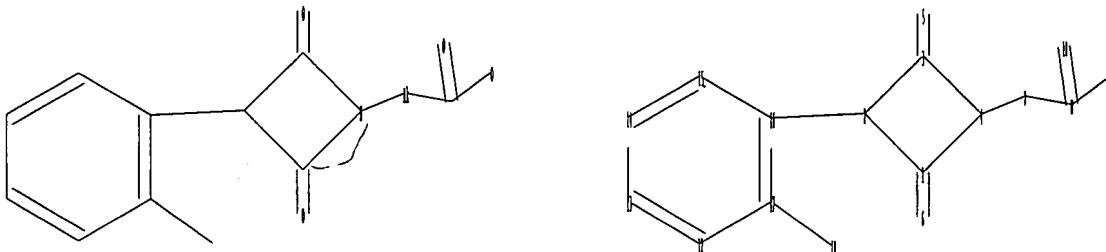
=> s l10 sss full  
FULL SEARCH INITIATED 11:05:24 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 6664 TO ITERATE

100.0% PROCESSED 6664 ITERATIONS  
SEARCH TIME: 00.00.01

11 ANSWERS

L12 11 SEA SSS FUL L10

=>  
Uploading C:\Program Files\Stnexp\Queries\10519835d.str

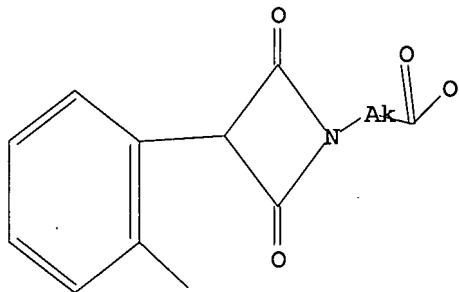


chain nodes :  
5 6 7 8 9 10 18  
ring nodes :  
1 2 3 4 12 13 14 15 16 17  
chain bonds :  
1-6 2-16 3-5 4-7 7-8 8-9 8-10 17-18  
ring bonds :  
1-2 1-4 2-3 3-4 12-13 12-17 13-14 14-15 15-16 16-17  
exact/norm bonds :  
1-2 1-4 1-6 2-3 3-4 3-5 4-7 7-8 8-9 8-10  
exact bonds :  
2-16 17-18  
normalized bonds :  
12-13 12-17 13-14 14-15 15-16 16-17  
isolated ring systems :  
containing 1 : 12 :

Match level :  
1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS  
10:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS

L13 STRUCTURE UPLOADED

=> d 113  
L13 HAS NO ANSWERS  
L13 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 113  
SAMPLE SEARCH INITIATED 11:07:11 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 4 TO ITERATE

100.0% PROCESSED 4 ITERATIONS  
SEARCH TIME: 00.00.01

0 ANSWERS -

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 4 TO 200  
PROJECTED ANSWERS: 0 TO 0

L14 0 SEA SSS SAM L13

=> s 113 sss full  
FULL SEARCH INITIATED 11:07:19 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 83 TO ITERATE

100.0% PROCESSED 83 ITERATIONS  
SEARCH TIME: 00.00.01

0 ANSWERS

L15 0 SEA SSS FUL L13

=> d his

(FILE 'HOME' ENTERED AT 10:58:33 ON 18 MAY 2007)

FILE 'REGISTRY' ENTERED AT 10:58:47 ON 18 MAY 2007  
L1 STRUCTURE UPLOADED  
L2 0 S L1  
L3 0 S L1 SSS FULL  
L4 STRUCTURE UPLOADED  
L5 0 S L4

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L6 0 S L4 SSS FULL  
L7 STRUCTURE UPLOADED  
L8 0 S L7  
L9 0 S L7 SSS FULL  
L10 STRUCTURE UPLOADED  
L11 0 S L10  
L12 11 S L10 SSS FULL  
L13 ~~STRUCTURE UPLOADED~~  
L14 0 S L13  
L15 0 S L13 SSS FULL

=> FIL HCAPLUS

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	865.00	865.21

FILE 'HCAPLUS' ENTERED AT 11:07:56 ON 18 MAY 2007  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
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FILE COVERS 1907 - 18 May 2007 VOL 146 ISS 22  
FILE LAST UPDATED: 15 May 2007 (20070515/ED)

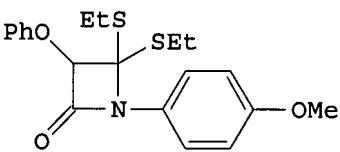
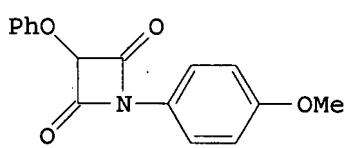
New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate

=> s l12  
L16 7 L12

=> d l16 ibib abs hitstr tot

L16 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1992:469674 HCAPLUS  
DOCUMENT NUMBER: 117:69674  
TITLE: A facile synthesis of azetidine-2,4-diones  
AUTHOR(S): Bari, S. S.; Trehan, I. R.; Sharma, A. K.; Manhas, M. S.  
CORPORATE SOURCE: Dep. Chem., Panjab Univ., Chandigarh, India  
SOURCE: Synthesis (1992), (5), 439-42  
CODEN: SYNTBF; ISSN: 0039-7881  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 117:69674  
GI



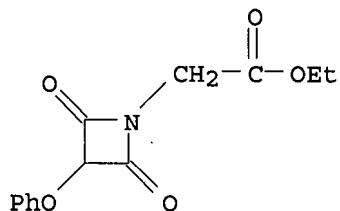
AB Azetidine-2,4-diones, e.g. I, can be conveniently synthesized by mild oxidative hydrolysis of 4,4-bis(alkylthio)azetidin-2-ones, e.g. II, using N-bromosuccinimide.

IT 142389-08-0P 142389-09-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

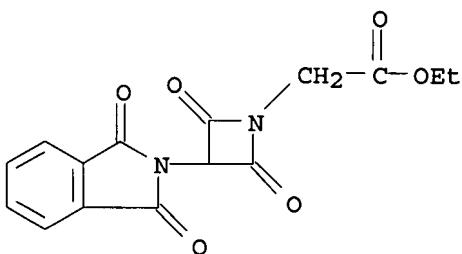
RN 142389-08-0 HCPLUS

CN 1-Azetidineacetic acid, 2,4-dioxo-3-phenoxy-, ethyl ester (9CI) (CA INDEX NAME)



RN 142389-09-1 HCPLUS

CN 1-Azetidineacetic acid, 3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



L16 ANSWER 2 OF 7 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:407106 HCPLUS

DOCUMENT NUMBER: 111:7106

TITLE: Studies related to penicillins. Part 26. Conversion of potassium benzylpenicillinate into 1-substituted derivatives of 3-phenylacetamidoazetidine-2,4-dione

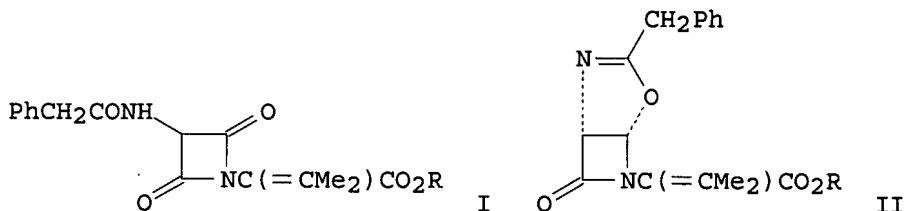
AUTHOR(S): Kaura, Arun C.; Stoodley, Richard J.

CORPORATE SOURCE: Dep. Org. Chem., Univ. Newcastle upon Tyne, Newcastle upon Tyne, NE1 7RU, UK

SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1988), (10), 2813-20

CODEN: JCPRB4; ISSN: 0300-922X

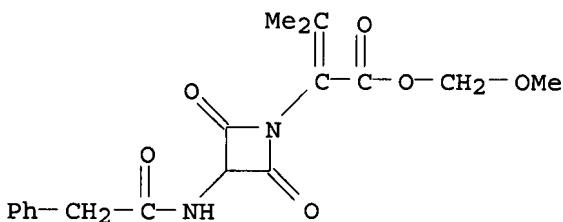
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 111:7106  
GI



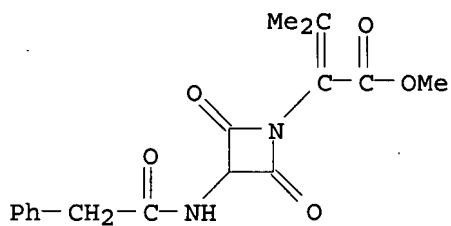
AB A new method for the synthesis of azetidine-2,4-diones, involving a Norrish Type II photoreaction of 4-pyruvoylazetidin-2-ones, has been devised. The process features in two strategies in which potassium benzylpenicillinate is converted into azetidine-2,4-diones I ( $R = Me$ ,  $CH_2C_6H_4NO_2-4$ ,  $CHCOMe$ ). In one strategy, oxadiazabicyclo[3.2.0]heptenones II were treated with pyruvic acid to give the (3R,4R)-3-phenylacetamido-4-pyruvoyloxyazetidin-2-ones (III), photolysis converted III into I. II were derived from (2R,3S)-4-oxo-3-phenylacetamidoazetidine-2-sulfinic acids by a novel oxidative desulfinylation induced by  $Pb(OAc)_4$ . In the second strategy, (1S,5R)-analogs of II were treated with pyruvic acid to give (3S,4S)-3-phenylacetamido-4-pyruvoyloxyazetidin-2-ones. Photolysis with loss of  $MeSH$  gave I ( $R = Me$ ). I ( $R = CH_2OMe$ ) was transformed into I ( $R = H$ ) by  $CF_3CO_2H$ . I ( $R = H$ ) lacked antibacterial activity and  $\beta$ -lactamase-inhibitory properties.

IT 121003-02-9P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

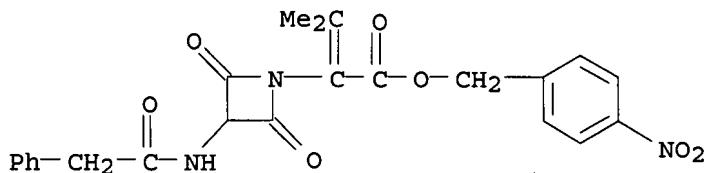
RN 121003-02-9 HCAPLUS  
CN 1-Azetidineacetic acid,  $\alpha$ -(1-methylethylidene)-2,4-dioxo-3-[(phenylacetyl)amino]-, methoxymethyl ester (9CI) (CA INDEX NAME)



IT 71840-43-2P 121002-97-9P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 71840-43-2 HCPLUS  
CN 1-Azetidineacetic acid,  $\alpha$ -(1-methylethylidene)-2,4-dioxo-3-  
[(phenylacetyl)amino]-, methyl ester (9CI) (CA INDEX NAME)



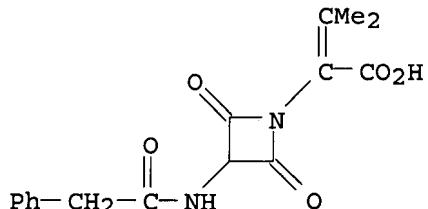
RN 121002-97-9 HCAPLUS

CN 1-Azetidineacetic acid,  $\alpha$ -(1-methylethylidene)-2,4-dioxo-3-[(phenylacetyl)amino]-, (4-nitrophenyl)methyl ester (9CI) (CA INDEX NAME)

IT 121003-03-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation, esterification, and bactericidal activity of)

RN 121003-03-0 HCAPLUS

CN 1-Azetidineacetic acid,  $\alpha$ -(1-methylethylidene)-2,4-dioxo-3-[(phenylacetyl)amino]- (9CI) (CA INDEX NAME)

L16 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1982:6476 HCAPLUS

DOCUMENT NUMBER: 96:6476

TITLE: 5,6-Dehydropenicillins

INVENTOR(S): Re, Luciano; Brant, Alberto; Bassignani, Luciano

PATENT ASSIGNEE(S): Snamprogetti SpA, Italy

SOURCE: U.S., 9 pp. Division of U.S. Ser. No. 949,546,  
abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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10519835.trn

US 4288366	A	19810908	US 1979-58945	19790719
US 4133807	A	19790109	US 1977-769527	19770217
GB 1572140	A	19800723	GB 1979-1747	19770222
US 4353825	A	19821012	US 1981-236029	19810219
DK 8101952	A	19810501	DK 1981-1952	19810501
DK 8105587	A	19811216	DK 1981-5587	19811216

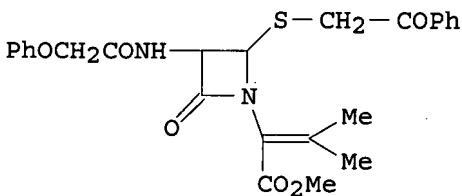
PRIORITY APPLN. INFO.:

US 1978-949546	A3	19781010
US 1977-769527	A3	19770217
IT 1976-20451	A	19760223
IT 1976-20457		19760223
DK 1977-771	A	19770222
GB 1977-7500	A	19770222
US 1979-58945	A3	19790719

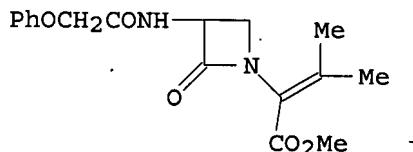
OTHER SOURCE(S):

MARPAT 96:6476

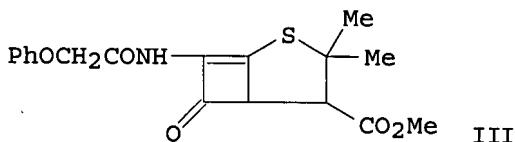
GI



I



II



III

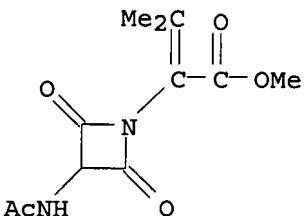
AB Irradiation of I gave II which was cyclized to pencillanate III.

IT 79977-00-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 79977-00-7 HCPLUS

CN 1-Azetidineacetic acid, 3-(acetylamino)- $\alpha$ -(1-methylethyldene)-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)



L16 ANSWER 4 OF 7 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1980:180878 HCPLUS

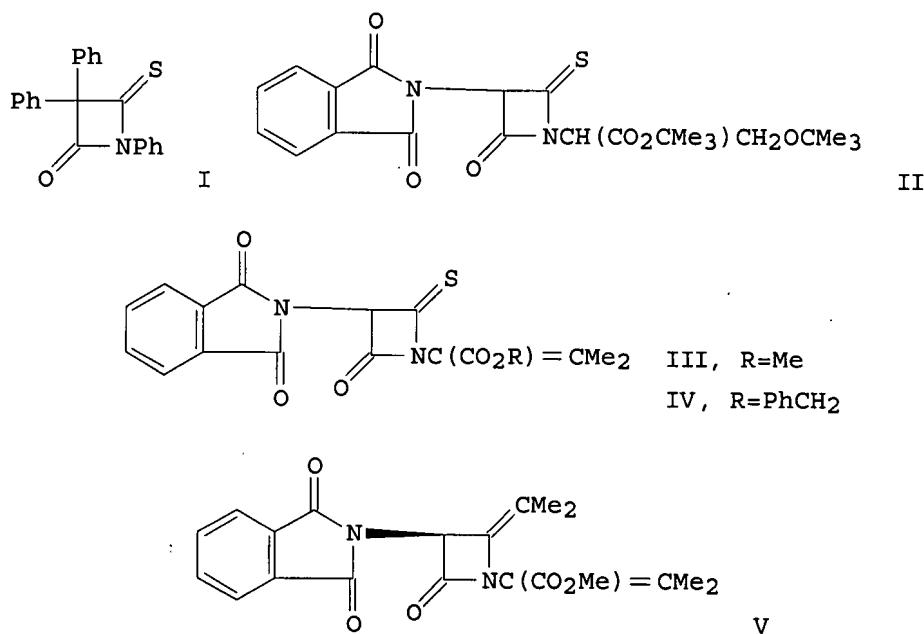
DOCUMENT NUMBER: 92:180878

TITLE: Properties and reactions of 4-thioxo-2-azetidinones

AUTHOR(S): Bachi, Mario D.; Goldberg, Ora; Gross, Akiva; Vaya, Jacob

CORPORATE SOURCE: Dep. Org. Chem., Weizmann Inst. Sci., Rehovot, Israel

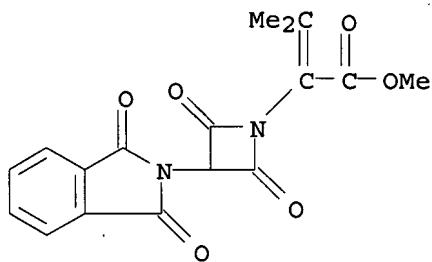
SOURCE: Journal of Organic Chemistry (1980), 45(8), 1481-5  
DOCUMENT TYPE: CODEN: JOCEAH; ISSN: 0022-3263  
LANGUAGE: English  
GI



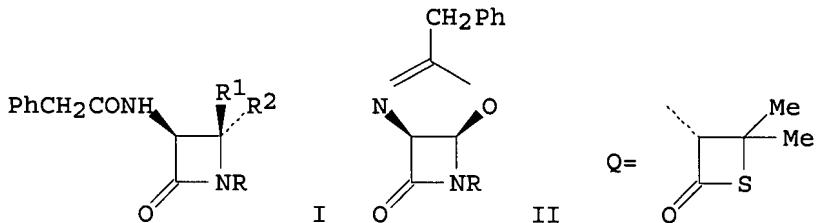
AB 4-Thioxo-2-azetidinones I-IV appear to be suitable substrates for contrasting the chemical of the C:O and C:S linkages. Hydrolysis and alcoholysis occur selectively at the carbonyl bond while 1,3-dipolar reagents like diazoalkanes and ozone, as well as carbenes, attack exclusively at the thiocarbonyl function. The 4-alkylidene-2-azetidinones, e.g. I, were obtained from the 4-thioxo-2-azetidinones III or IV and 2-diazopropane, diphenyldiazomethane, or Et diazomalonate. The reactions with 2-diazopropane involved the formation of thiadiazolines from which the S and N elements were extruded. The reactions with the last two reagents which were performed in the presence of  $\text{Rh}(\text{OAc})_2$  involved carbene intermediates.

IT 69939-41-9P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

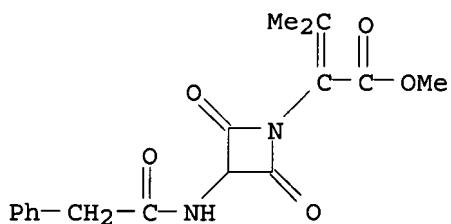
RN 69939-41-9 HCAPLUS  
CN 1-Azetidineacetic acid, 3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-  
  (1-methylethylidene)-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)



L16 ANSWER 5 OF 7 HCPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1980:76192 HCPLUS  
 DOCUMENT NUMBER: 92:76192  
 TITLE: Preparation of 3-phenylacetamidoazetidine-2,4-diones  
 AUTHOR(S): Kaura, Arun C.; Stoodley, Richard J.  
 CORPORATE SOURCE: Dep. Org. Chem., Univ. Newcastle upon Tyne, Newcastle upon Tyne, UK  
 SOURCE: Journal of the Chemical Society, Chemical Communications (1979), (7), 344-5  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 92:76192  
 GI



AB Irradiation of pyruvates I [R = C(CO<sub>2</sub>Me) : CMe<sub>2</sub>, Q, R<sub>1</sub> = H, R<sub>2</sub> = O<sub>2</sub>CCOMe], prepared (72% in the former case) by treating oxazoloazetidinones II (R as before) with pyruvic acid, in benzene gave diones I (R as before, R<sub>1</sub>R<sub>2</sub> = O) in 87 and 43% yields, resp.  
 IT 71840-43-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 71840-43-2 HCPLUS  
 CN 1-Azetidineacetic acid,  $\alpha$ -(1-methylethylidene)-2,4-dioxo-3-[(phenylacetyl)amino]-, methyl ester (9CI) (CA INDEX NAME)



L16 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1979:168383 HCAPLUS

DOCUMENT NUMBER: 90:168383

TITLE:

Reactions of 4-thioxo-2-azetidinones: synthesis of a 2,4-azetidinedione and of 4-alkylidene-2-azetidinones

AUTHOR(S): Bachi, Mario D.; Goldberg, Ora; Gross, Akiva

CORPORATE SOURCE: Dep. Org. Chem., Weizmann Inst. Sci., Rehovot, Israel

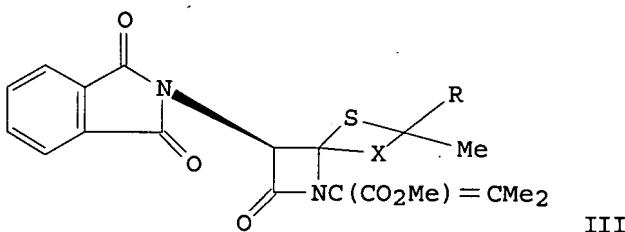
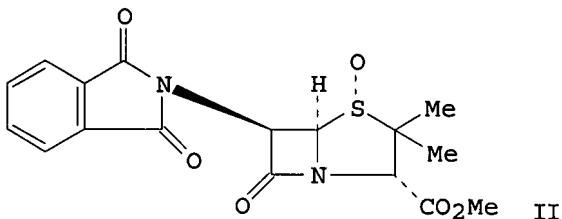
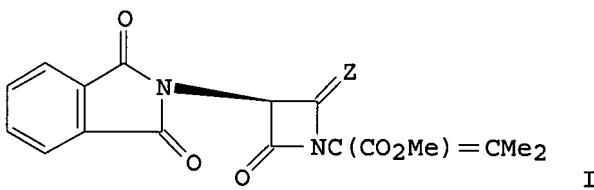
SOURCE: Tetrahedron Letters (1978), (43), 4167-70

CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



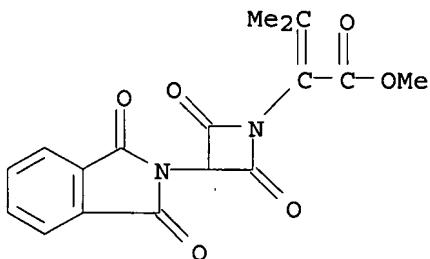
AB Thioxoazetidinone I ( $Z = S$ ), prepared from sulfoxide II by sequential ring cleavage with  $\text{CH}_2:\text{CHCO}_2\text{Me}$ , isomerization, and thermal elimination reaction, on ozonolysis gave 85% I ( $Z = O$ ). I ( $Z = O$ ) is the 1st example of a malonimide bearing an imido group at C-3. Reaction of I ( $Z = S$ ) with

MeCHN<sub>2</sub> gave 45% thiirane III (X = bond, R = H), and with EtCHN<sub>2</sub> gave 75% III (X = N:N, R = Me) (IV). III (X = bond, R = Me) was obtained (quant.) on decomposition of IV at ambient temperature for 5 days. I (Z = CHMe, CMe<sub>2</sub>) were obtained (95%) by desulfurization of III (X = bond, R = H, Me, resp.) with Ph<sub>3</sub>P in C<sub>6</sub>H<sub>6</sub>.

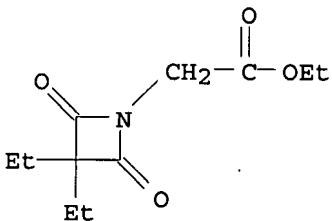
IT 69939-41-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 69939-41-9 HCAPLUS

CN 1-Azetidineacetic acid, 3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)- $\alpha$ -(1-methylethylidene)-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)



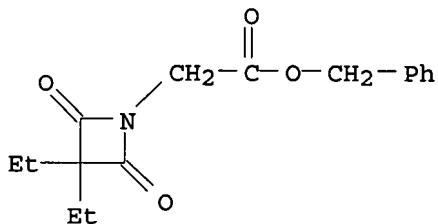
L16 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1972:112987 HCAPLUS  
 DOCUMENT NUMBER: 76:112987  
 TITLE: Synthesis of malonimide derivatives as potential penicillin analogs  
 AUTHOR(S): Golik, Uri  
 CORPORATE SOURCE: Dep. Chem., Weizmann Inst. Sci., Rehovot, Israel  
 SOURCE: Journal of Heterocyclic Chemistry (1972), 9(1), 21-4  
 CODEN: JHTCAD; ISSN: 0022-152X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI For diagram(s), see printed CA Issue.  
 AB Malonimidoacetic acid derivs. (I, II) were synthesized as potential penicillin analogs, but they failed to inhibit the growth of bacteria when tested in vitro against a range of gram-pos. and gram-neg. microorganisms.  
 IT 35359-51-4P 35359-54-7P 35359-55-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 35359-51-4 HCAPLUS  
 CN 1-Azetidineacetic acid, 3,3-diethyl-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



RN 35359-54-7 HCAPLUS

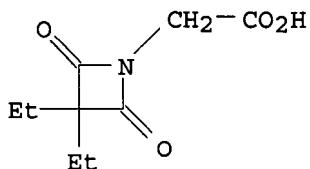
10519835.trn

CN 1-Azetidineacetic acid, 3,3-diethyl-2,4-dioxo-, phenylmethyl ester (9CI)  
(CA INDEX NAME)



RN 35359-55-8 HCPLUS

CN 1-Azetidineacetic acid, 3,3-diethyl-2,4-dioxo- (9CI) (CA INDEX NAME)



=> s imidoalkanpercarboxylic acids

0 IMIDOALKANPERCARBOXYLIC

1574229 ACIDS

L17 0 IMIDOALKANPERCARBOXYLIC ACIDS

(IMIDOALKANPERCARBOXYLIC (W) ACIDS)

=> s imidoalkanpercarboxylic

0 IMIDOALKANPERCARBOXYLIC

L18 0 IMIDOALKANPERCARBOXYLIC

=> s imidopercarboxylic

L19 5 IMIDOPERCARBOXYLIC

=> d 119 ibib abs hitstr tot

L19 ANSWER 1 OF 5 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:1042379 HCPLUS

DOCUMENT NUMBER: 143:328182

TITLE: Dilution process for imidopercarboxylic acids solution

INVENTOR(S): Bianchi, Ugo Piero; Garaffa, Roberto

PATENT ASSIGNEE(S): Solvay Solexis S.p.A. Italy

SOURCE: PCT Int. Appl., 22 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005090544	A1	20050929	WO 2005-EP51172	20050315

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,  
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,  
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,  
 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,  
 SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,  
 RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,  
 MR, NE, SN, TD, TG

EP 1727887 A1 20061206 EP 2005-717046 20050315

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR

CN 1930278 A 20070314 CN 2005-80008194 20050315

PRIORITY APPLN. INFO.: IT 2004-MI497 A 20040316  
 WO 2005-EP51172 W 20050315

OTHER SOURCE(S): MARPAT 143:328182

AB A process for obtaining dilute aqueous solns. containing an amount of < 7% by weight,

expressed as a percentage by weight, of imidoalkanepercarboxylic acids, starting with concentrated aqueous compns. of the said peracids in the  $\beta$  form, the said concentrated compns. being obtained from the imidoalkanepercarboxylic acids in the  $\alpha$ -crystal form, comprises the following steps: (I) dilution of the concentrated aqueous composition of imidoalkanepercarboxylic acids (C) with

an aqueous solution (D) having a pH of between 2 and 5, in a (C):(D) proportion,

expressed in parts by weight, of between 0.1:10 and 10:0.2, working at temps. of between 4° and 30°; (II) application to the dilute aqueous composition obtained in (I) of a shear force off at least 5000 s-1, until a constant dynamic viscosity is obtained; (III) dilution of the dilute aqueous composition

treated in (II) to obtain an imidoalkanepercarboxylic acid concentration of < 7%

by weight; (IV) optionally, final homogenization of the composition. Such dilute aqueous

compns. are used in detergency applications, in disinfection applications, and are applied by means of dispersers (triggers).

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:1127241 HCAPLUS

DOCUMENT NUMBER: 142:76602

TITLE: Manufacture of storage-stable percarboxylic acid-based polyelectrolyte capsule system

INVENTOR(S): Schmiedel, Peter; Buzzacchi, Matteo; Kaiser, Heribert; Von Rybinski, Wolfgang; Orlich, Bernhard

PATENT ASSIGNEE(S): Henkel Kommanditgesellschaft auf Aktien, Germany

SOURCE: PCT Int. Appl.: 67 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004110613	A1	20041223	WO 2004-EP6169	20040608

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,  
 CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,  
 GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,  
 LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO,  
 NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,  
 TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,  
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
 SN, TD, TG

DE 10361170 A1 20050105 DE 2003-10361170 20031222

EP 1633471 A1 20060315 EP 2004-739697 20040608

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK

US 2006172909 A1 20060803 US 2005-303060 20051213

PRIORITY APPLN. INFO.: DE 2003-10327127 A 20030613

DE 2003-10361170 A 20031222

WO 2004-EP6169 W 20040608

AB A multilayer capsule system containing organic percarboxylic acids, especially imidopercarboxylic acids (e.g. 6-phthalimidoperoxyacrylic acid), useful in liquid detergents and cleaners, dental care products, hair dyes, and decolorants or bleaching agents, is manufactured by depositing on percarboxylic acid particles  $\geq 2$  different shell layers each based on a polyelectrolyte and/or ionic surfactant. Thus, spraying 300 g Eureco W (72% 6-phthalimidoperoxyacrylic acid) at 50° in a fluidized bed with 150 mL Luviquat Care (polycation) containing 1% Sequion 10H60, drying, spraying with 100 mL Sokalan CP 45 containing 1% Sequion 10H60 and repeating the procedure gave encapsulated particles (particle size 200-2000  $\mu\text{m}$ ) containing 61% active substance (6-phthalimidoperoxyacrylic acid).

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 3 OF 5 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:1127240 HCPLUS

DOCUMENT NUMBER: 142:76601

TITLE: Manufacture of storage-stable percarboxylic acid-based capsules

INVENTOR(S): Schmiedel, Peter; Kaiser, Heribert; Scholl, Elke; Von Rybinski, Wolfgang

PATENT ASSIGNEE(S): Henkel Kommanditgesellschaft auf Aktien, Germany

SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004110612	A1	20041223	WO 2004-EP6168	20040608
W: AE, AG, AL, AM, AT, AU, AZ, CN, CO, CR, CU, CZ, DK, DM, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			BA, BB, BG, BR, BW, BY, BZ, CA, CH, GB, GD, GE, FI, EG, ES, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,	
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,				

SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
SN, TD, TG  
 DE 10361100 A1 20050105 DE 2003-10361100 20031222  
 EP 1633468 A1 20060315 EP 2004-736308 20040608  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK  
 US 2007032396 A1 20070208 US 2005-299166 20051209  
 PRIORITY APPLN. INFO.: DE 2003-10327127 A 20030613  
 DE 2003-10361100 A 20031222  
 WO 2004-EP6168 W 20040608

AB A capsule system containing organic percarboxylic acids, especially imidopercarboxylic acids (e.g. 6-phthalimidoperoxyacrylic acid), useful in liquid detergents and cleaners, dental care products, hair dyes, and decolorants or bleaching agents, is manufactured by depositing on percarboxylic acid particles  $\geq 1$  inorg. acid salt. Thus, spraying 800 g Eureco W (72% 6-phthalimidoperoxyacrylic acid) with 800 g of 20% aqueous Na<sub>2</sub>SO<sub>4</sub> solution containing 1% Sequion 10H60 and separating particles <2.0 mm by sieving gave encapsulated bleach particles containing 70.5% active substance. The encapsulated particles were incorporated in a liquid detergent formulation which was stored at 40° to show 99% and 95% bleach activity after 1 and 2 wk, resp., vs. 75% and 65% for similar composition containing unencapsulated Eureco W.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:1127239 HCAPLUS  
 DOCUMENT NUMBER: 142:76600  
 TITLE: Manufacture of gel capsules containing percarboxylic acid bleach  
 INVENTOR(S): Schmiedel, Peter; Barreleiro, Paula; Von Rybinski, Wolfgang; Orlich, Bernhard  
 PATENT ASSIGNEE(S): Henkel Kommanditgesellschaft auf Aktien, Germany  
 SOURCE: PCT Int. Appl., 55 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004110611	A1	20041223	WO 2004-EP6167	20040608
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10361084	A1	20050105	DE 2003-10361084	20031222
EP 1633470	A1	20060315	EP 2004-739696	20040608
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
JP 2006527292	T	20061130	JP 2006-515852	20040608
US 2006178285	A1	20060810	US 2005-299795	20051212

naphthalenedicarboximido; each R = H, (un)substituted alkyl, OH, CO<sub>2</sub>H, CO<sub>2</sub>OH, CO<sub>2</sub>R<sub>1</sub>; R<sub>1</sub> = C<sub>1</sub>-5 (un)substituted alkyl; n = 1-5], prepared by the reaction of H<sub>2</sub>O<sub>2</sub> with the acid or anhydride in concentrated H<sub>2</sub>SO<sub>4</sub> or MeSO<sub>3</sub>H or in an alkaline medium, are useful as bleaching agents, especially in the laundering

of fabrics at low temps. Phthalimidoacetic acid in MeSO<sub>3</sub>H was treated with H<sub>2</sub>O<sub>2</sub> to give phthalimidoperacetic acid, which was used with a laundry detergent at 40° for the bleaching of cotton fabrics stained with red wine.

=> FIL REGISTRY

COST IN U.S. DOLLARS

SINCE FILE

ENTRY

TOTAL

SESSION

FULL ESTIMATED COST

113.44

978.65

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

ENTRY

TOTAL

SESSION

CA SUBSCRIBER PRICE

-9.36

-9.36

FILE 'REGISTRY' ENTERED AT 11:22:22 ON 18 MAY 2007

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STRUCTURE FILE UPDATES: 17 MAY 2007 HIGHEST RN 935249-87-9

DICTIONARY FILE UPDATES: 17 MAY 2007 HIGHEST RN 935249-87-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

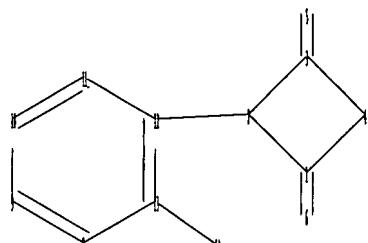
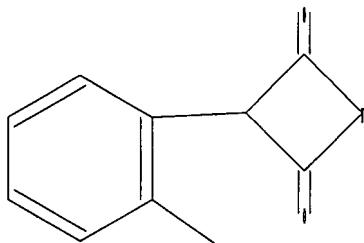
Please note that search-term pricing does apply when conducting SmartSELECT searches.

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<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10519835e.str



chain nodes :

5 6 14

10519835.trn

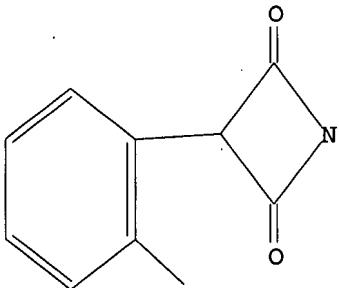
```
ring nodes :  
1 2 3 4 8 9 10 11 12 13  
chain bonds :  
1-6 2-12 3-5 13-14  
ring bonds :  
1-2 1-4 2-3 3-4 8-9 8-13 9-10 10-11 11-12 12-13  
exact/norm bonds :  
1-2 1-4 1-6 2-3 3-4 3-5  
exact bonds :  
2-12 13-14  
normalized bonds :  
8-9 8-13 9-10 10-11 11-12 12-13  
isolated ring systems :  
containing 1 : 8 :
```

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 8:Atom 9:Atom 10:Atom 11:Atom  
12:Atom 13:Atom 14:CLASS

L20 STRUCTURE UPLOADED

=> d 120  
L20 HAS NO ANSWERS  
L20 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 120  
SAMPLE SEARCH INITIATED 11:22:41 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 4 TO ITERATE

100.0% PROCESSED 4 ITERATIONS 1 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 4 TO 200  
PROJECTED ANSWERS: 1 TO 80

L21 1 SEA SSS SAM L20

=> s 120 sss full

10519835.trn

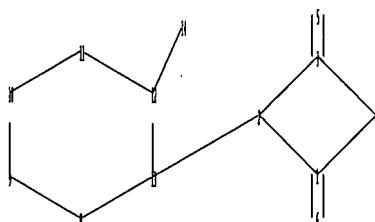
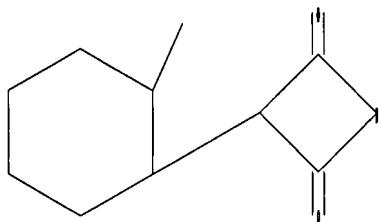
FULL SEARCH INITIATED 11:22:48 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 83 TO ITERATE

100.0% PROCESSED 83 ITERATIONS  
SEARCH TIME: 00.00.01

2 ANSWERS

L22 2 SEA SSS FUL L20

=>  
Uploading C:\Program Files\Stnexp\Queries\10519835f.str



chain nodes :

5 6 14

ring nodes :

1 2 3 4 8 9 10 11 12 13

chain bonds :

1-6 2-13 3-5 12-14

ring bonds :

1-2 1-4 2-3 3-4 8-9 8-13 9-10 10-11 11-12 12-13

exact/norm bonds :

1-2 1-4 1-6 2-3 3-4 3-5

exact bonds :

2-13 8-9 8-13 9-10 10-11 11-12 12-13 12-14

isolated ring systems :

containing 1 : 8 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 8:Atom 9:Atom 10:Atom 11:Atom  
12:Atom 13:Atom 14:CLASS

<-----User Break----->

## PRIORITY APPLN. INFO.:

DE 2003-10327127 A 20030613  
 DE 2003-10361084 A 20031222  
 WO 2004-EP6167 W 20040608

AB Storage-stable gel capsules containing organic percarboxylic acids, especially imidopercarboxylic acids (e.g. 6-phthalimidoperoxyacrylic acid), useful especially in liquid detergents and cleaners, dental care products, hair dyes, and decolorants or bleaching compns. for tech. applications, were manufactured by incorporating solid percarboxylic acid particles in a gel matrix obtained by solidification and/or gelling of an oil phase m. <35°, e.g., a paraffin oil, glyceride, vegetable oil, etc., and containing a gel-forming agent and stabilizing agent, e.g., a block copolymer. For example, adding 2% Kraton G 1650 to low-viscosity paraffin oil at 70° with stirring gave a homogeneous solution which was cooled to 40°, 60% (based on paraffin oil + Kraton) of homogenized Eureco W (72% 6-phthalimidoperoxyacrylic acid) was added with stirring, the mixture was poured in 5 vols. of H2O with stirring, and cooled. The encapsulated 6-phthalimidoperoxyacrylic acid particles which settled at the bottom were separated and the fraction <1 mm incorporated (6%) in a liquid detergent composition which was stored at 40° to give 100.0% and 99.2% active O content after 1 and 2 wk, resp., vs. 87.5 and 80.0% for similar detergent containing non-capsulated Eureco W.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 5 OF 5 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1990:80000 HCPLUS  
 DOCUMENT NUMBER: 112:80000  
 TITLE: Bleaching agents comprising aromatic imide percarboxylic acids and their preparation and use  
 INVENTOR(S): Venturello, Carlo; Cavallotti, Claudio; Burzio, Fulvio  
 PATENT ASSIGNEE(S): Ausimont S.p.A., Italy  
 SOURCE: Eur. Pat. Appl., 11 pp.  
 CODEN: EPXXDW

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 325289	A1	19890726	EP 1989-101003	19890120
EP 325289	B1	19930901		
R: AT, BE, CH, DE, ES, FR, GB, LI, NL, SE				
AU 8928678	A	19890720	AU 1989-28678	19890120
AU 614322	B2	19910829		
JP 02001473	A	19900105	JP 1989-11742	19890120
JP 2786222	B2	19980813		
AT 93908	T	19930915	AT 1989-101003	19890120
ES 2058348	T3	19941101	ES 1989-101003	19890120
CA 1340680	C	19990727	CA 1989-588845	19890120
BR 8900265	A	19890919	BR 1989-265	19890123
US 5520844	A	19960528	US 1991-637479	19910104
US 5688434	A	19971118	US 1996-593655	19960129
PRIOR	APPLN. INFO.:			
		IT 1988-19131	A 19880120	
		US 1989-298918	B1 19890119	
		EP 1989-101003	A 19890120	
		US 1991-637479	A3 19910104	

OTHER SOURCE(S): MARPAT 112:80000

AB Peroxy acids X(CHR)nCO2OH [X = (un)substituted phthalimido or

10519835.trn

Enrol

## Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID : SSSPTA1626GMS

**PASSWORD :**

TERMINAL (ENTER 1, 2, 3, OR ?):2

NEWS	1	Web Page for STN Seminar Schedule - N. America
NEWS	2	JAN 08 CHEMLIST enhanced with New Zealand Inventory of Chemicals
NEWS	3	JAN 16 CA/CAplus Company Name Thesaurus enhanced and reloaded
NEWS	4	JAN 16 IPC version 2007.01 thesaurus available on STN
NEWS	5	JAN 16 WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
NEWS	6	JAN 22 CA/CAplus updated with revised CAS roles
NEWS	7	JAN 22 CA/CAplus enhanced with patent applications from India
NEWS	8	JAN 29 PHAR reloaded with new search and display fields
NEWS	9	JAN 29 CAS Registry Number crossover limit increased to 300,000 in multiple databases
NEWS	10	FEB 15 PATDPASPC enhanced with Drug Approval numbers
NEWS	11	FEB 15 RUSSIAPAT enhanced with pre-1994 records
NEWS	12	FEB 23 KOREAPAT enhanced with IPC 8 features and functionality
NEWS	13	FEB 26 MEDLINE reloaded with enhancements
NEWS	14	FEB 26 EMBASE enhanced with Clinical Trial Number field
NEWS	15	FEB 26 TOXCENTER enhanced with reloaded MEDLINE
NEWS	16	FEB 26 IFICDB/IFIPAT/IFIUDB reloaded with enhancements
NEWS	17	FEB 26 CAS Registry Number crossover limit increased from 10,000 to 300,000 in multiple databases
NEWS	18	MAR 15 WPIDS/WPIX enhanced with new FRAGHITSTR display format
NEWS	19	MAR 16 CASREACT coverage extended
NEWS	20	MAR 20 MARPAT now updated daily
NEWS	21	MAR 22 LWPI reloaded
NEWS	22	MAR 30 RDISCLOSURE reloaded with enhancements
NEWS	23	APR 02 JICST-EPLUS removed from database clusters and STN
NEWS	24	APR 30 GENBANK reloaded and enhanced with Genome Project ID field
NEWS	25	APR 30 CHEMCATS enhanced with 1.2 million new records
NEWS	26	APR 30 CA/CAplus enhanced with 1870-1889 U.S. patent records
NEWS	27	APR 30 INPADOC replaced by INPADOCDB on STN
NEWS	28	MAY 01 New CAS web site launched
NEWS	29	MAY 08 CA/CAplus Indian patent publication number format defined
NEWS	30	MAY 14 RDISCLOSURE on STN Easy enhanced with new search and display fields
NEWS EXPRESS		NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
NEWS HOURS		STN Operating Hours Plus Help Desk Availability
NEWS LOGIN		Welcome Banner and News Items
NEWS IPC8		For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 14:33:37 ON 18 MAY 2007

=>

## Uploading

THIS COMMAND NOT AVAILABLE IN THE CURRENT F

Do you want to

Choice (Y/n) :

Switching to the Registry File...  
Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

## => FILE REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 14:33:53 ON 18 MAY 2007  
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STRUCTURE FILE UPDATES: 17 MAY 2007 HIGHEST RN 935249-87-9  
DICTIONARY FILE UPDATES: 17 MAY 2007 HIGHEST RN 935249-87-9

New CAS Information Use Policies - enter HELP-USAGETERMS for details

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

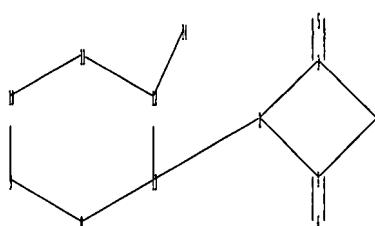
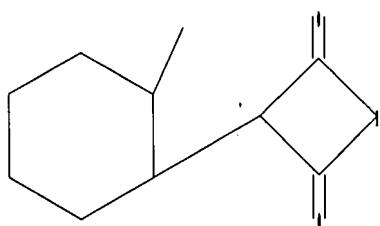
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stnqen/stndoc/properties.html>

```
=> Uploading C:\Program Files\Stnexp\Queries\10519835f.str
```

10519835.trn



chain nodes :

5 6 14

ring nodes :

1 2 3 4 8 9 10 11 12 13

chain bonds :

1-6 2-13 3-5 12-14

ring bonds :

1-2 1-4 2-3 3-4 8-9 8-13 9-10 10-11 11-12 12-13

exact/norm bonds :

1-2 1-4 1-6 2-3 3-4 3-5

exact bonds :

2-13 8-9 8-13 9-10 10-11 11-12 12-13 12-14

isolated ring systems :

containing 1 : 8 :

Match level :

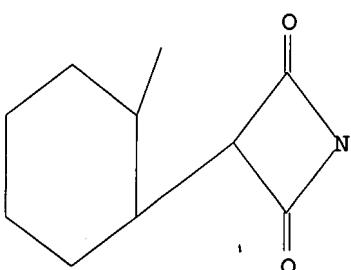
1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 8:Atom 9:Atom 10:Atom 11:Atom  
12:Atom 13:Atom 14:CLASS

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 14:34:06 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED

0 ITERATIONS

0 ANSWERS

10519835.trn

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 0 TO 0  
PROJECTED ANSWERS: 0 TO 0

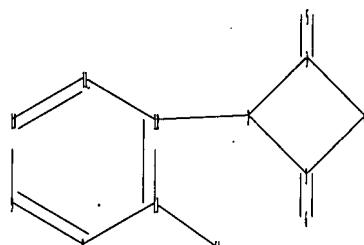
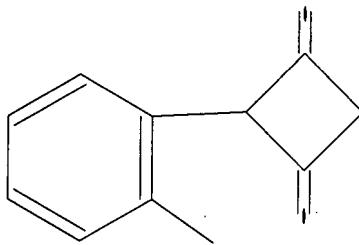
L2 0 SEA SSS SAM L1

=> s 11 sss full  
FULL SEARCH INITIATED 14:34:12 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 52 TO ITERATE

100.0% PROCESSED 52 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

L3 0 SEA SSS FUL L1

=>  
Uploading C:\Program Files\Stnexp\Queries\10519835e.str



chain nodes :  
5 6 14  
ring nodes :  
1 2 3 4 8 9 10 11 12 13  
chain bonds :  
1-6 2-12 3-5 13-14  
ring bonds :  
1-2 1-4 2-3 3-4 8-9 8-13 9-10 10-11 11-12 12-13  
exact/norm bonds :  
1-2 1-4 1-6 2-3 3-4 3-5  
exact bonds :  
2-12 13-14  
normalized bonds :  
8-9 8-13 9-10 10-11 11-12 12-13  
isolated ring systems :  
containing 1 : 8 :

Match level :  
1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 8:Atom 9:Atom 10:Atom 11:Atom  
12:Atom 13:Atom 14:CLASS

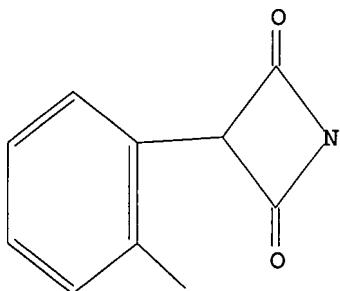
L4 STRUCTURE UPLOADED

=> d 14  
L4 HAS NO ANSWERS

10519835.trn

L4

STR



Structure attributes must be viewed using STN Express query preparation.

=> s 14

SAMPLE SEARCH INITIATED 14:36:03 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 4 TO ITERATE

100.0% PROCESSED 4 ITERATIONS 1 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 4 TO 200  
PROJECTED ANSWERS: 1 TO 80

L5 1 SEA SSS SAM L4

=> s 14 sss full  
FULL SEARCH INITIATED 14:36:09 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 83 TO ITERATE

100.0% PROCESSED 83 ITERATIONS 2 ANSWERS  
SEARCH TIME: 00.00.01

L6 2 SEA SSS FUL L4

	SINCE FILE	TOTAL
	ENTRY	SESSION
COST IN U.S. DOLLARS		
FULL ESTIMATED COST	345.10	345.31

FILE 'HCAPLUS' ENTERED AT 14:36:14 ON 18 MAY 2007  
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FILE COVERS 1907 - 18 May 2007 VOL 146 ISS 22  
FILE LAST UPDATED: 15 May 2007 (20070515/ED)

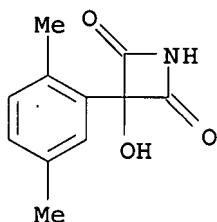
New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate

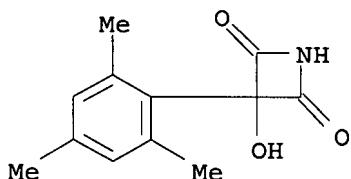
=> s 16  
L7 1 L6

=> d 17 ibib abs hitstr tot

L7 ANSWER 1 OF 1 HCPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1940:6252 HCPLUS  
DOCUMENT NUMBER: 34:6252  
ORIGINAL REFERENCE NO.: 34:1012i,1013a-c  
TITLE: Azetidine derivatives. I. 2,4-Diketo-3-hydroxy-3-arylazetidines  
AUTHOR(S): Riebsomer, J. L.; Burkett, Howard; Hodgson, Thomas;  
Senour, Fred  
SOURCE: Journal of the American Chemical Society (1939), 61,  
3491-3  
CODEN: JACSAT; ISSN: 0002-7863  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
GI For diagram(s), see printed CA Issue.  
AB Ph(OH)C(CO<sub>2</sub>Et)<sub>2</sub> (25 g.) and 7.5 g. Na in 80 cc. absolute EtOH, heated to 115-20° and treated with 10 g. CO(NH<sub>2</sub>)<sub>2</sub>, stirred at 115-20° for 5 hrs., 10 g. CO(NH<sub>2</sub>)<sub>2</sub> again added and the stirring and heating continued for about 11 hrs., the solution evaporated to dryness, the product dissolved in 100 cc. H<sub>2</sub>O, 50 g. ice and 10% HCl added until the solution is acid, and the solution extracted with Et<sub>2</sub>O, give 17% of 2,4-diketo-3-hydroxy-3-phenylazetidine, PhC(OH).CO.NH.CO, m. 107.5-8°; NH<sub>3</sub> may be bubbled into the mixture instead of the addition of CO(NH<sub>2</sub>)<sub>2</sub>, the yield being about 3%. Similarly prepared were the p-tolyl derivative, m. 131° (9%); the p-ethylphenyl derivative, m. 105-6° (24%); the 2,5-dimethylphenyl derivative, m. 135-6° (37%); the mesityl derivative, m. 151-2° (6%); the p-sec-butylphenyl derivative, m. 89-90° (38%). The structure of these compds. follows from their hydrolysis with NaOH to PhCH(OH)CO<sub>2</sub>H and its derivs., Ph(HO)C(CO<sub>2</sub>Na)<sub>2</sub> being assumed as an intermediate. These compds. are inactive as hypnotics when given to rabbits and are toxic in relatively small doses.  
IT 857955-59-0P, Tartronimide, α-2,5-xylyl-  
857955-73-8P, Tartronimide, α-(mesityl)-  
RL: PREP (Preparation)  
(preparation of)  
RN 857955-59-0 HCPLUS  
CN Tartronimide, α-2,5-xylyl- (4CI) (CA INDEX NAME)



RN 857955-73-8 HCAPLUS  
 CN Tartronimide,  $\alpha$ -(mesityl)- (4CI) (CA INDEX NAME)



=> FIL REGISTRY			
COST IN U.S. DOLLARS	SINCE FILE	TOTAL	
	ENTRY	SESSION	
FULL ESTIMATED COST	15.67	360.98	
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL	
	ENTRY	SESSION	
CA SUBSCRIBER PRICE	-0.78	-0.78	

FILE 'REGISTRY' ENTERED AT 14:38:51 ON 18 MAY 2007  
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STRUCTURE FILE UPDATES: 17 MAY 2007 HIGHEST RN 935249-87-9  
 DICTIONARY FILE UPDATES: 17 MAY 2007 HIGHEST RN 935249-87-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

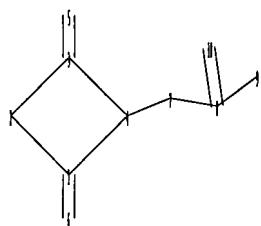
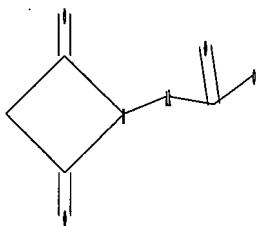
Please note that search-term pricing does apply when  
 conducting SmartSELECT searches.

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 predicted properties as well as tags indicating availability of  
 experimental property data in the original document. For information  
 on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

10519835.trn

=>  
Uploading C:\Program Files\Stnexp\Queries\10519835c.str



chain nodes :  
5 6 7 8 9 10

ring nodes :

1 2 3 4

chain bonds :

1-6 3-5 4-7 7-8 8-9 8-10

ring bonds :

1-2 1-4 2-3 3-4

exact/norm bonds :

1-2 1-4 1-6 2-3 3-4 3-5 4-7 7-8 8-9 8-10

isolated ring systems :

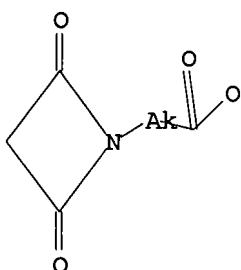
containing 1 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS  
10:CLASS

L8 STRUCTURE UPLOADED

=> d 18  
L8 HAS NO ANSWERS  
L8 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 18  
SAMPLE SEARCH INITIATED 14:39:05 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 351 TO ITERATE

100.0% PROCESSED 351 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

10519835.trn

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 5896 TO 8144  
PROJECTED ANSWERS: 0 TO 0

L9 0 SEA SSS SAM L8

=> s 18 sss full  
FULL SEARCH INITIATED 14:39:12 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 6664 TO ITERATE

100.0% PROCESSED 6664 ITERATIONS 11 ANSWERS  
SEARCH TIME: 00.00.01

L10 11 SEA SSS FUL L8

=> FIL HCAPLUS  
COST IN U.S. DOLLARS SINCE FILE TOTAL  
SESSION  
FULL ESTIMATED COST ENTRY 172.10 533.08  
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL  
SESSION  
CA SUBSCRIBER PRICE ENTRY 0.00 -0.78

FILE 'HCAPLUS' ENTERED AT 14:39:18 ON 18 MAY 2007  
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FILE COVERS 1907 - 18 May 2007 VOL 146 ISS 22  
FILE LAST UPDATED: 15 May 2007 (20070515/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

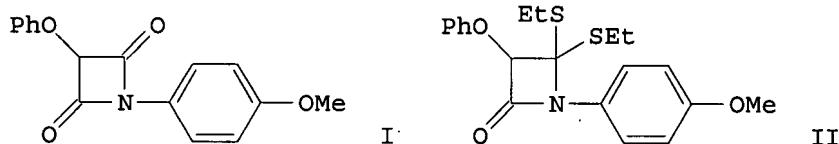
This file contains CAS Registry Numbers for easy and accurate

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L11 7 L10

=> d 111 ibib abs hitstr tot

L11 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1992:469674 HCAPLUS  
DOCUMENT NUMBER: 117:69674  
TITLE: A facile synthesis of azetidine-2,4-diones  
AUTHOR(S): Bari, S. S.; Trehan, I. R.; Sharma, A. K.; Manhas, M. S.

CORPORATE SOURCE: Dep. Chem., Panjab Univ., Chandigarh, India  
SOURCE: Synthesis (1992), (5), 439-42  
CODEN: SYNTBF; ISSN: 0039-7881  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S) : CASREACT 117:69674  
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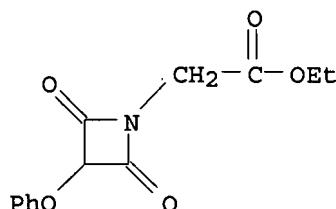


AB Azetidine-2,4-diones, e.g. I, can be conveniently synthesized by mild oxidative hydrolysis of 4,4-bis(alkylthio)azetidin-2-ones, e.g. II, using N-bromosuccinimide.

IT 142389-08-0P 142389-09-1P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(manufacture of)

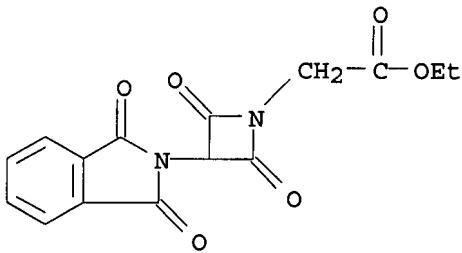
BN 142388-02-0 HGRBLUS (preparation of)

RN 142389-08-0 HCAPLUS  
CN 1-Azetidineacetic acid, 2,4-dioxo-3-phenoxy-, ethyl ester (9CI) (CA INDEX  
NAME)



RN 142389-09-1 HCAPLUS

CN 1-Azetidineacetic acid, 3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



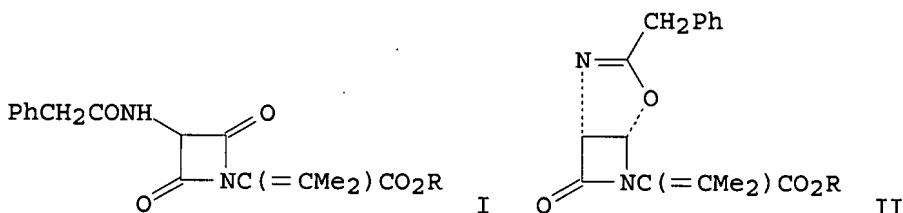
L11 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:407106 HCPLUS

DOCUMENT NUMBER: 111:7106

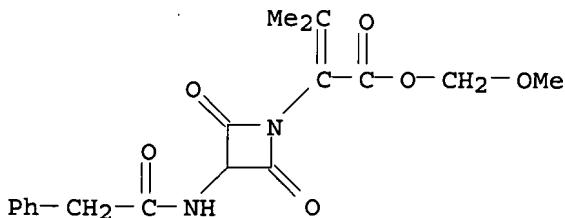
**TITLE:** Studies related to penicillins. Part 26. Conversion of potassium benzylpenicillinate into 1-substituted

AUTHOR(S): derivatives of 3-phenylacetamidoazetidine-2,4-dione  
 Kaura, Arun C.; Stoodley, Richard J.  
 CORPORATE SOURCE: Dep. Org. Chem., Univ. Newcastle upon Tyne, Newcastle  
 upon Tyne, NE1 7RU, UK  
 SOURCE: Journal of the Chemical Society, Perkin Transactions  
 1: Organic and Bio-Organic Chemistry (1972-1999)  
 (1988), (10), 2813-20  
 DOCUMENT TYPE: CODEN: JCPRB4; ISSN: 0300-922X  
 Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 111:7106  
 GI



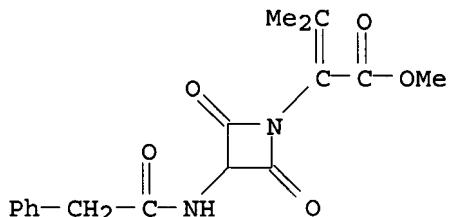
AB A new method for the synthesis of azetidine-2,4-diones, involving a Norrish Type II photoreaction of 4-pyruvylazetidin-2-ones, has been devised. The process features in two strategies in which potassium benzylpenicillinate is converted into azetidine-2,4-diones I (R = Me, CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>NO<sub>2</sub>-4, CHCOMe). In one strategy, oxadiazabicyclo[3.2.0]heptenones II were treated with pyruvic acid to give the (3R,4R)-3-phenylacetamido-4-pyruvoyloxyazetidin-2-ones (III), photolysis converted III into I. II were derived from (2R,3S)-4-oxo-3-phenylacetamidoazetidine-2-sulfinic acids by a novel oxidative desulfinylation induced by Pb(OAc)<sub>4</sub>. In the second strategy, (1S,5R)-analogs of II were treated with pyruvic acid to give (3S,4S)-3-phenylacetamido-4-pyruvoyloxyazetidin-2-ones. Photolysis with loss of MeSH gave I (R = Me). I (R = CH<sub>2</sub>OMe) was transformed into I (R = H) by CF<sub>3</sub>CO<sub>2</sub>H. I (R = H) lacked antibacterial activity and  $\beta$ -lactamase-inhibitory properties.

IT 121003-02-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and ester hydrolysis of)  
 RN 121003-02-9 HCAPLUS  
 CN 1-Azetidineacetic acid,  $\alpha$ -(1-methylethylidene)-2,4-dioxo-3-[(phenylacetyl)amino]-, methoxymethyl ester (9CI) (CA INDEX NAME)

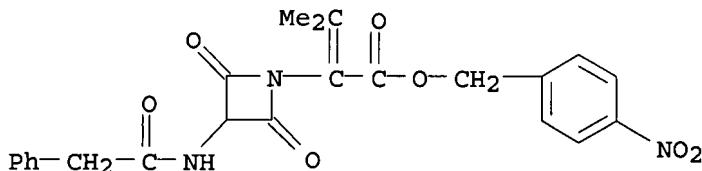


IT 71840-43-2P 121002-97-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)

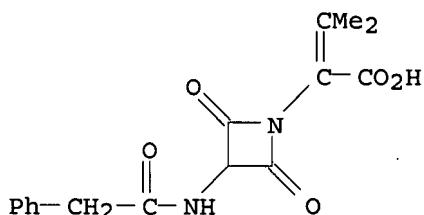
(preparation of)  
 RN 71840-43-2 HCPLUS  
 CN 1-Azetidineacetic acid,  $\alpha$ -(1-methylethylidene)-2,4-dioxo-3-[(phenylacetyl)amino]-, methyl ester (9CI) (CA INDEX NAME)



RN 121002-97-9 HCPLUS  
 CN 1-Azetidineacetic acid,  $\alpha$ -(1-methylethylidene)-2,4-dioxo-3-[(phenylacetyl)amino]-, (4-nitrophenyl)methyl ester (9CI) (CA INDEX NAME)



IT 121003-03-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation, esterification, and bactericidal activity of)  
 RN 121003-03-0 HCPLUS  
 CN 1-Azetidineacetic acid,  $\alpha$ -(1-methylethylidene)-2,4-dioxo-3-[(phenylacetyl)amino]- (9CI) (CA INDEX NAME)



L11 ANSWER 3 OF 7 HCPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1982:6476 HCPLUS  
 DOCUMENT NUMBER: 96:6476  
 TITLE: 5,6-Dehydropenicillins  
 INVENTOR(S): Re, Luciano; Brant, Alberto; Bassignani, Luciano  
 PATENT ASSIGNEE(S): Snamprogetti SpA, Italy  
 SOURCE: U.S., 9 pp. Division of U.S. Ser. No. 949,546,  
 abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English

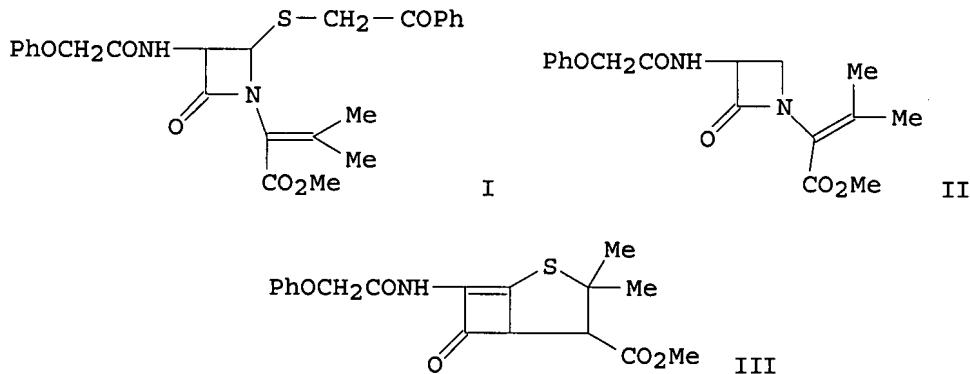
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FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4288366	A	19810908	US 1979-58945	19790719
US 4133807	A	19790109	US 1977-769527	19770217
GB 1572140	A	19800723	GB 1979-1747	19770222
US 4353825	A	19821012	US 1981-236029	19810219
DK 8101952	A	19810501	DK 1981-1952	19810501
DK 8105587	A	19811216	DK 1981-5587	19811216
PRIORITY APPLN. INFO.:			US 1978-949546	A3 19781010
			US 1977-769527	A3 19770217
			IT 1976-20451	A 19760223
			IT 1976-20457	19760223
			DK 1977-771	A 19770222
			GB 1977-7500	A 19770222
			US 1979-58945	A3 19790719

OTHER SOURCE(S): MARPAT 96:6476  
GI



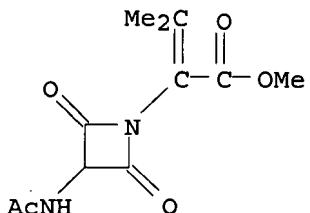
AB Irradiation of I gave II which was cyclized to pencillanate III.

IT 79977-00-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

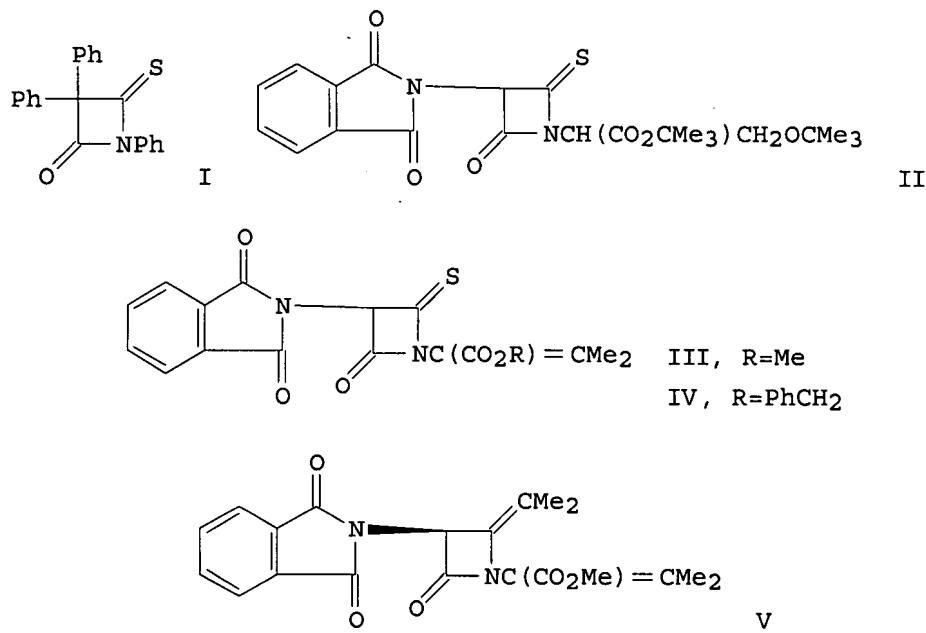
RN 79977-00-7 HCPLUS

CN 1-Azetidineacetic acid, 3-(acetylamino)- $\alpha$ -(1-methylethyldene)-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)



L11 ANSWER 4 OF 7 HCPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1980:180878 HCPLUS

DOCUMENT NUMBER: 92:180878  
 TITLE: Properties and reactions of 4-thioxo-2-azetidinones  
 AUTHOR(S): Bachi, Mario D.; Goldberg, Ora; Gross, Akiva; Vaya, Jacob  
 CORPORATE SOURCE: Dep. Org. Chem., Weizmann Inst. Sci., Rehovot, Israel  
 SOURCE: Journal of Organic Chemistry (1980), 45(8), 1481-5  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
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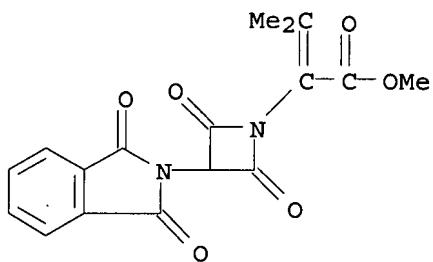


AB 4-Thioxo-2-azetidinones I-IV appear to be suitable substrates for contrasting the chemical of the C:O and C:S linkages. Hydrolysis and alcoholysis occur selectively at the carbonyl bond while 1,3-dipolar reagents like diazoalkanes and ozone, as well as carbenes, attack exclusively at the thiocarbonyl function. The 4-alkylidene-2-azetidinones, e.g. I, were obtained from the 4-thioxo-2-azetidinones III or IV and 2-diazopropane, diphenyldiazomethane, or Et diazomalonate. The reactions with 2-diazopropane involved the formation of thiadiazolines from which the S and N elements were extruded. The reactions with the last two reagents which were performed in the presence of Rh(OAc)<sub>2</sub> involved carbene intermediates.

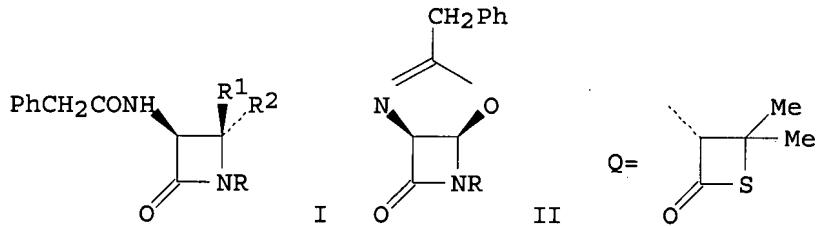
IT 69939-41-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 69939-41-9 HCAPLUS

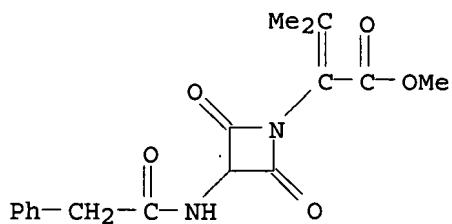
CN 1-Azetidineacetic acid, 3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)- $\alpha$ -(1-methylethylidene)-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)



L11 ANSWER 5 OF 7 HCPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1980:76192 HCPLUS  
 DOCUMENT NUMBER: 92:76192  
 TITLE: Preparation of 3-phenylacetamidoazetidine-2,4-diones  
 AUTHOR(S): Kaura, Arun C.; Stoodley, Richard J.  
 CORPORATE SOURCE: Dep. Org. Chem., Univ. Newcastle upon Tyne, Newcastle upon Tyne, UK  
 SOURCE: Journal of the Chemical Society, Chemical Communications (1979), (7), 344-5  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 92:76192  
 GI



AB Irradiation of pyruvates I [R = C(CO2Me):CMe2, Q, R1 = H, R2 = O2CCOMe], prepared (72% in the former case) by treating oxazoloazetidinones II (R as before) with pyruvic acid, in benzene gave diones I (R as before, R1R2 = O) in 87 and 43% yields, resp.  
 IT 71840-43-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 71840-43-2 HCPLUS  
 CN 1-Azetidineacetic acid,  $\alpha$ -(1-methylethylidene)-2,4-dioxo-3-[(phenylacetyl)amino]-, methyl ester (9CI) (CA INDEX NAME)



L11 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1979:168383 HCAPLUS

DOCUMENT NUMBER: 90:168383

TITLE:

Reactions of 4-thioxo-2-azetidinones: synthesis of a 2,4-azetidinedione and of 4-alkylidene-2-azetidinones

Bachi, Mario D.; Goldberg, Ora; Gross, Akiva

CORPORATE SOURCE: Dep. Org. Chem., Weizmann Inst. Sci., Rehovot, Israel

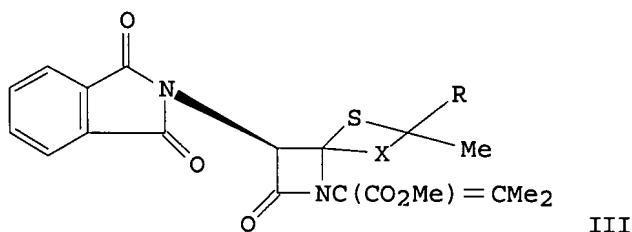
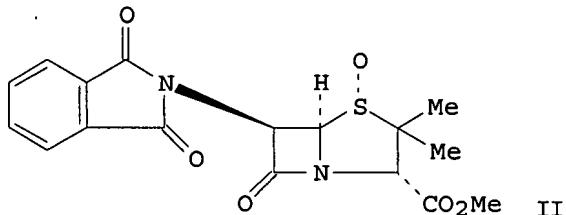
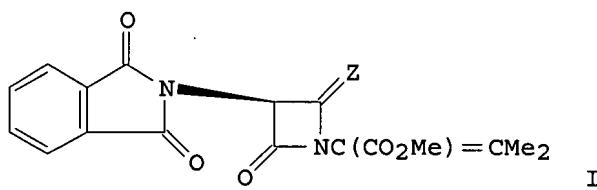
SOURCE: Tetrahedron Letters (1978), (43), 4167-70

CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB Thioxoazetidinone I ( $Z = S$ ), prepared from sulfoxide II by sequential ring cleavage with  $\text{CH}_2:\text{CHCO}_2\text{Me}$ , isomerization, and thermal elimination reaction, on ozonolysis gave 85% I ( $Z = O$ ). I ( $Z = O$ ) is the 1st example of a malonimide bearing an imido group at C-3. Reaction of I ( $Z = S$ ) with

MeCHN<sub>2</sub> gave 45% thiirane III (X = bond, R = H), and with EtCHN<sub>2</sub> gave 75% III (X = N:N, R = Me) (IV). III (X = bond, R = Me) was obtained (quant.) on decomposition of IV at ambient temperature for 5 days. I (Z = CHMe, CMe<sub>2</sub>) were

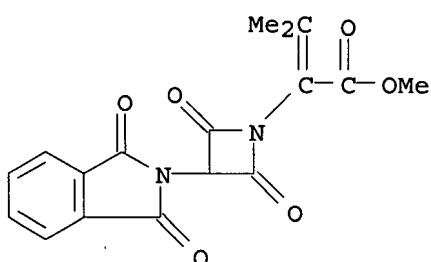
obtained (95%) by desulfurization of III (X = bond, R = H, Me, resp.) with Ph<sub>3</sub>P in C<sub>6</sub>H<sub>6</sub>.

IT 69939-41-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 69939-41-9 HCPLUS

CN 1-Azetidineacetic acid, 3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)- $\alpha$ -(1-methylethylidene)-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)



L11 ANSWER 7 OF 7 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1972:112987 HCPLUS

DOCUMENT NUMBER: 76:112987

TITLE: Synthesis of malonimide derivatives as potential penicillin analogs

AUTHOR(S): Golik, Uri

CORPORATE SOURCE: Dep. Chem., Weizmann Inst. Sci., Rehovot, Israel

SOURCE: Journal of Heterocyclic Chemistry (1972), 9(1), 21-4  
CODEN: JHTCAD; ISSN: 0022-152X

DOCUMENT TYPE: Journal

LANGUAGE: English

GI For diagram(s), see printed CA Issue.

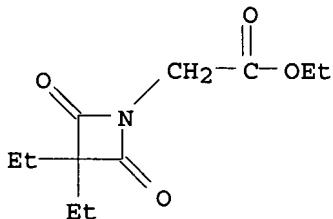
AB Malonimidoacetic acid derivs. (I, II) were synthesized as potential penicillin analogs, but they failed to inhibit the growth of bacteria when tested in vitro against a range of gram-pos. and gram-neg. microorganisms.

IT 35359-51-4P 35359-54-7P 35359-55-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 35359-51-4 HCPLUS

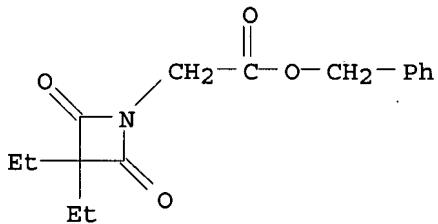
CN 1-Azetidineacetic acid, 3,3-diethyl-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



RN 35359-54-7 HCPLUS

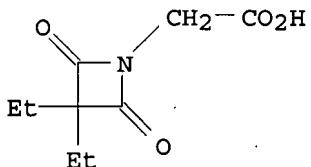
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CN 1-Azetidineacetic acid, 3,3-diethyl-2,4-dioxo-, phenylmethyl ester (9CI)  
(CA INDEX NAME)



RN 35359-55-8 HCPLUS

CN 1-Azetidineacetic acid, 3,3-diethyl-2,4-dioxo- (9CI) (CA INDEX NAME)



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DICTIONARY FILE UPDATES: 17 MAY 2007 HIGHEST RN 935249-87-9

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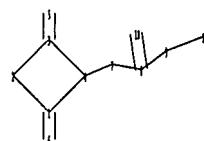
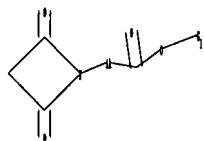
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<http://www.cas.org/support/stngen/stndoc/properties.html>

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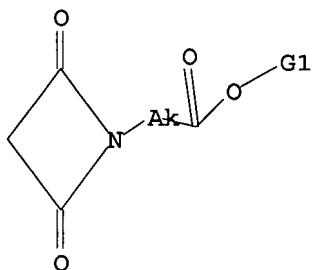
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1 2 3 4  
chain bonds :  
1-6 3-5 4-7 7-8 8-9 8-10 9-13  
ring bonds :  
1-2 1-4 2-3 3-4  
exact/norm bonds :  
1-2 1-4 1-6 2-3 3-4 3-5 4-7 7-8 8-9 8-10 9-13  
isolated ring systems :  
containing 1 :

G1:H,M

Match level :  
1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS  
10:CLASS 13:CLASS

L12 STRUCTURE UPLOADED

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L12 HAS NO ANSWERS  
L12 STR



G1 H,M

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100.0% PROCESSED 351 ITERATIONS 0 ANSWERS
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BATCH **COMPLETE**
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PROJECTED ANSWERS: 0 TO 0
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L13 0 SEA SSS SAM L12

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L14 2 SEA SSS FUL L12

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	ENTRY	SESSION	
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FILE COVERS 1907 - 18 May 2007 VOL 146 ISS 22  
 FILE LAST UPDATED: 15 May 2007 (20070515/ED)

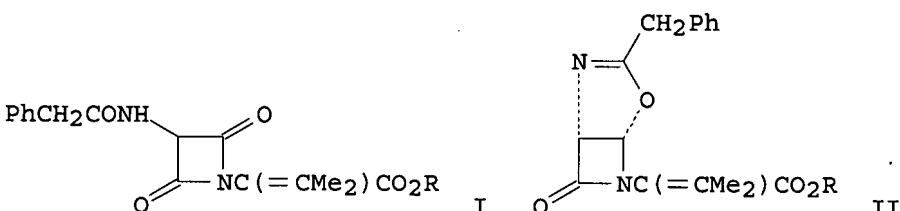
New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate

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L15 ANSWER 1 OF 2 HCPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1989:407106 HCPLUS  
 DOCUMENT NUMBER: 111:7106  
 TITLE: Studies related to penicillins. Part 26. Conversion of potassium benzylpenicillinate into 1-substituted derivatives of 3-phenylacetamidoazetidine-2,4-dione  
 AUTHOR(S): Kaura, Arun C.; Stoodley, Richard J.  
 CORPORATE SOURCE: Dep. Org. Chem., Univ. Newcastle upon Tyne, Newcastle upon Tyne, NE1 7RU, UK  
 SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1988), (10), 2813-20  
 DOCUMENT TYPE: CODEN: JCPRB4; ISSN: 0300-922X  
 LANGUAGE: Journal  
 English  
 OTHER SOURCE(S): CASREACT 111:7106  
 GI



AB A new method for the synthesis of azetidine-2,4-diones, involving a Norrish Type II photoreaction of 4-pyruvoylazetidin-2-ones, has been devised. The process features in two strategies in which potassium benzylpenicillinate is converted into azetidine-2,4-diones I (R = Me, CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>NO<sub>2</sub>-4, CHCOMe). In one strategy, oxadiazabicyclo[3.2.0]heptenones II were treated with pyruvic acid to give the (3R,4R)-3-phenylacetamido-4-pyruvoyloxyazetidin-2-ones (III), photolysis converted III into I. II were derived from (2R,3S)-4-oxo-3-phenylacetamidoazetidine-2-sulfinic acids by a novel oxidative desulfinylation induced by Pb(OAc)<sub>4</sub>. In the second strategy, (1S,5R)-analogs of II were treated with pyruvic acid to give (3S,4S)-3-phenylacetamido-4-pyruvoyloxyazetidin-2-ones. Photolysis with loss of MeSH gave I (R = Me). I (R = CH<sub>2</sub>OMe) was transformed into I

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(R = H) by CF<sub>3</sub>CO<sub>2</sub>H. I (R = H) lacked antibacterial activity and  $\beta$ -lactamase-inhibitory properties.

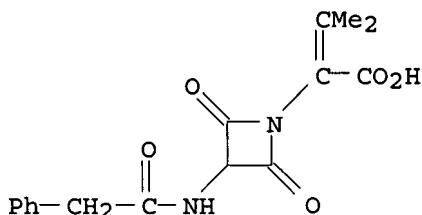
IT 121003-03-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation, esterification, and bactericidal activity of)

RN 121003-03-0 HCAPLUS

CN 1-Azetidineacetic acid,  $\alpha$ -(1-methylethylidene)-2,4-dioxo-3-[(phenylacetyl)amino]- (9CI) (CA INDEX NAME)



L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1972:112987 HCAPLUS

DOCUMENT NUMBER: 76:112987

TITLE: Synthesis of malonimide derivatives as potential penicillin analogs

AUTHOR(S): Golik, Uri

CORPORATE SOURCE: Dep. Chem., Weizmann Inst. Sci., Rehovot, Israel

SOURCE: Journal of Heterocyclic Chemistry (1972), 9(1), 21-4  
CODEN: JHTCAD; ISSN: 0022-152X

DOCUMENT TYPE: Journal

LANGUAGE: English

GI For diagram(s), see printed CA Issue.

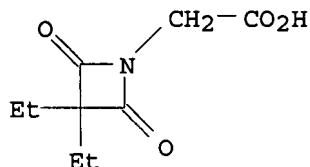
AB Malonimidoacetic acid derivs. (I, II) were synthesized as potential penicillin analogs, but they failed to inhibit the growth of bacteria when tested in vitro against a range of gram-pos. and gram-neg. microorganisms.

IT 35359-55-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 35359-55-8 HCAPLUS

CN 1-Azetidineacetic acid, 3,3-diethyl-2,4-dioxo- (9CI) (CA INDEX NAME)



=> FILE REGISTRY

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

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781.21

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TOTAL

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=>  
Uploading C:\Program Files\Stnexp\Queries\10519835h.str



chain nodes :  
5 6 7 8 9 10  
ring nodes :  
1 2 3 4  
chain bonds :  
1-6 3-5 4-7 7-8 8-9 8-10  
ring bonds :  
1-2 1-4 2-3 3-4  
exact/norm bonds :  
1-2 1-4 1-6 2-3 3-4 3-5 4-7 7-8 8-9 8-10  
isolated ring systems :  
containing 1 :

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G1:H,M

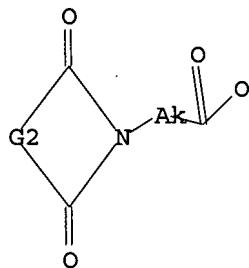
G2:A,Cb,Cy,Hy,Ak,Ph

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS  
10:CLASS

L16 STRUCTURE UPLOADED

=> d 116  
L16 HAS NO ANSWERS  
L16 STR

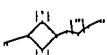
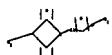


G1 H,M  
G2 A,Cb,Cy,Hy,Ak,Ph

Structure attributes must be viewed using STN Express query preparation.

=> s 116  
GENERIC GROUP NOT VALID HERE  
Generic groups may not be used in these circumstances:  
1. Any generic group node (e.g., Hy) in a ring.  
2. An Ak node attached to another Ak node.

=>  
Uploading C:\Program Files\Stnexp\Queries\10519835i.str



10519835.trn

chain nodes :  
5 6 7 8 9 10 13 15  
ring nodes :  
1 2 3 4  
chain bonds :  
1-6 2-15 3-5 4-7 7-8 8-9 8-10 9-13  
ring bonds :  
1-2 1-4 2-3 3-4  
exact/norm bonds :  
1-2 1-4 1-6 2-3 2-15 3-4 3-5 4-7 7-8 8-9 8-10 9-13  
isolated ring systems :  
containing 1 :

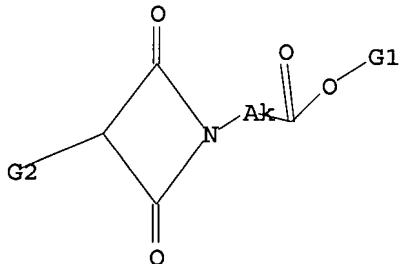
G1:H,M

G2:Cb,Cy,Hy,Ak,Ph

Match level :  
1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS  
10:CLASS 13:CLASS 15:CLASS

L17 STRUCTURE UPLOADED

=> d l17  
L17 HAS NO ANSWERS  
L17 STR



G1 H,M  
G2 Cb,Cy,Hy,Ak,Ph

Structure attributes must be viewed using STN Express query preparation.

=> s l17  
SAMPLE SEARCH INITIATED 14:49:23 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 350 TO ITERATE  
  
100.0% PROCESSED 350 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01  
  
FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 5878 TO 8122

10519835.trn

PROJECTED ANSWERS: 0 TO 0

L18 0 SEA SSS SAM L17

=> s 117 sss full  
FULL SEARCH INITIATED 14:49:30 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 6618 TO ITERATE

100.0% PROCESSED 6618 ITERATIONS 1 ANSWERS  
SEARCH TIME: 00.00.01

L19 1 SEA SSS FUL L17

=> FIL HCAPLUS  
COST IN U.S. DOLLARS SINCE FILE TOTAL  
ENTRY SESSION  
FULL ESTIMATED COST 174.35 955.56  
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FILE LAST UPDATED: 15 May 2007 (20070515/ED)

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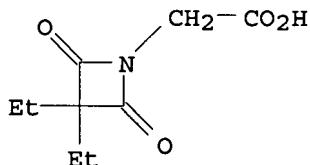
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L20 1 L19

=> d 120 ibib abs hitstr tot

L20 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1972:112987 HCAPLUS  
DOCUMENT NUMBER: 76:112987  
TITLE: Synthesis of malonimide derivatives as potential penicillin analogs  
AUTHOR(S): Golik, Uri  
CORPORATE SOURCE: Dep. Chem., Weizmann Inst. Sci., Rehovot, Israel  
SOURCE: Journal of Heterocyclic Chemistry (1972), 9(1), 21-4  
CODEN: JHTCAD; ISSN: 0022-152X  
DOCUMENT TYPE: Journal

LANGUAGE: English  
 GI For diagram(s), see printed CA Issue.  
 AB Malonimidoacetic acid derivs. (I, II) were synthesized as potential penicillin analogs, but they failed to inhibit the growth of bacteria when tested in vitro against a range of gram-pos. and gram-neg. microorganisms.  
 IT 35359-55-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 35359-55-8 HCAPLUS  
 CN 1-Azetidineacetic acid, 3,3-diethyl-2,4-dioxo- (9CI) (CA INDEX NAME)



```
=> s imidoalkan
      0 IMIDOALKAN
L21      0 IMIDOALKAN

=> s imidoalkanper
      0 IMIDOALKANPER
L22      0 IMIDOALKANPER

=> s imidocarboxylic acids
      22 IMIDOCARBOXYLIC
      1574229 ACIDS
L23      6 IMIDOCARBOXYLIC ACIDS
      (IMIDOCARBOXYLIC(W)ACIDS)

=> s l23 and crystalline
      77976 CRYSTALLINE
      249 CRYSTALLINES
      78204 CRYSTALLINE
      (CRYSTALLINE OR CRYSTALLINES)
      356565 CRYST
      1801 CRYSTS
      357833 CRYST
      (CRYST OR CRYSTS)
      383187 CRYSTALLINE
      (CRYSTALLINE OR CRYST)
L24      0 L23 AND CRYSTALLINE

=> s l23 and alkanper
      0 ALKANPER
L25      0 L23 AND ALKANPER

=> s l23 and alkan
      466 ALKAN
      4 ALKANS
      470 ALKAN
      (ALKAN OR ALKANS)
L26      0 L23 AND ALKAN
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10519835.trn

=> s percarboxylic acids  
278 PERCARBOXYLIC  
1574229 ACIDS  
L27 155 PERCARBOXYLIC ACIDS  
(PERCARBOXYLIC (W) ACIDS)

=> s l27 and imidoalkan  
0 IMIDOALKAN  
L28 0 L27 AND IMIDOALKAN

=> s l27 and imido  
5172 IMIDO  
14 IMIDOS  
5173 IMIDO  
(IMIDO OR IMIDOS)  
L29 2 L27 AND IMIDO

=> s l27 and crystalline  
77976 CRYSTALLINE  
249 CRYSTALLINES  
78204 CRYSTALLINE  
(CRYSTALLINE OR CRYSTALLINES)  
356565 CRYST  
1801 CRYSTS  
357833 CRYST  
(CRYST OR CRYSTS)  
383187 CRYSTALLINE  
(CRYSTALLINE OR CRYST)  
L30 0 L27 AND CRYSTALLINE

=> d his

(FILE 'HOME' ENTERED AT 14:33:37 ON 18 MAY 2007)

FILE 'REGISTRY' ENTERED AT 14:33:53 ON 18 MAY 2007  
L1 STRUCTURE UPLOADED  
L2 0 S L1  
L3 0 S L1 SSS FULL  
L4 STRUCTURE UPLOADED  
L5 1 S L4  
L6 2 S L4 SSS FULL

FILE 'HCAPLUS' ENTERED AT 14:36:14 ON 18 MAY 2007  
L7 1 S L6

FILE 'REGISTRY' ENTERED AT 14:38:51 ON 18 MAY 2007  
L8 STRUCTURE UPLOADED  
L9 0 S L8  
L10 11 S L8 SSS FULL

FILE 'HCAPLUS' ENTERED AT 14:39:18 ON 18 MAY 2007  
L11 7 S L10

FILE 'REGISTRY' ENTERED AT 14:42:37 ON 18 MAY 2007  
L12 STRUCTURE UPLOADED  
L13 0 S L12  
L14 2 S L12 SSS FULL

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L15 2 S L14

FILE 'REGISTRY' ENTERED AT 14:46:07 ON 18 MAY 2007

L16 STRUCTURE uploaded  
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 L19 1 S L17 SSS FULL

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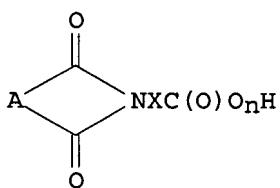
L20 1 S L19  
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 L22 0 S IMIDOALKANPER  
 L23 6 S IMIDOCARBOXYLIC ACIDS  
 L24 0 S L23 AND CRYSTALLINE  
 L25 0 S L23 AND ALKANPER  
 L26 0 S L23 AND ALKAN  
 L27 155 S PERCARBOXYLIC ACIDS  
 L28 0 S L27 AND IMIDOALKAN  
 L29 2 S L27 AND IMIDO  
 L30 0 S L27 AND CRYSTALLINE

=&gt; d l29 ibib abs hitstr tot

L29 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:583094 HCAPLUS  
 DOCUMENT NUMBER: 115:183094  
 TITLE: Continuous preparation of imido  
 percarboxylic acids  
 INVENTOR(S): Fuchs, Hermann; Gethoeffter, Hanspeter; Gilb, Walter  
 PATENT ASSIGNEE(S): Hoechst A.-G., Germany  
 SOURCE: Ger. Offen., 4 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4003309	A1	19910808	DE 1990-4003309	19900205
EP 441235	A2	19910814	EP 1991-101176	19910130
EP 441235	A3	19920226		
R: BE, CH, DE, FR, GB, IT, LI, NL				
US 5132431	A	19920721	US 1991-649619	19910201
CA 2035601	A1	19910806	CA 1991-2035601	19910204
JP 04211057	A	19920803	JP 1991-13473	19910204
PRIORITY APPLN. INFO.:			DE 1990-4003309	A 19900205
OTHER SOURCE(S):	MARPAT 115:183094			
GI				



AB Title compds. I [n = 2; A = alkylene, alkenylene, phenylene, naphthylene; X = C1-19 alkylene, phenylene] were prepared continuously by oxidizing I (n = 1) in H<sub>2</sub>SO<sub>4</sub> or MeSO<sub>3</sub>H with organic H<sub>2</sub>O<sub>2</sub> in a static mixer. Thus,  $\epsilon$ -phthalimidocaproic acid in H<sub>2</sub>SO<sub>4</sub> was treated with 50% aqueous H<sub>2</sub>O<sub>2</sub> to give 91% peracid.

L29 ANSWER 2 OF 2 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1990:76941 HCPLUS

DOCUMENT NUMBER: 112:76941

TITLE: Novel imido aromatic percarboxylic acids and their preparation and use as bleaching agents

INVENTOR(S): Venturello, Carlo; Cavallotti, Caludio

PATENT ASSIGNEE(S): Ausimont S.p.A., Italy

SOURCE: Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 325288	A1	19890726	EP 1989-101002	19890120
EP 325288	B1	19930901		
R: AT, BE, CH, DE, ES, FR, GB, LI, NL, SE				
US 5575947	A	19961119	US 1989-299017	19890119
AU 8928679	A	19890720	AU 1989-28679	19890120
AU 620067	B2	19920213		
JP 02196771	A	19900803	JP 1989-11743	19890120
JP 2786223	B2	19980813		
AT 93849	T	19930915	AT 1989-101002	19890120
ES 2058347	T3	19941101	ES 1989-101002	19890120
CA 1340679	C	19990727	CA 1989-588844	19890120
BR 8900264	A	19890919	BR 1989-264	19890123
PRIORITY APPLN. INFO.:			IT 1988-19132	A 19880120
			EP 1989-101002	A 19890120

OTHER SOURCE(S): MARPAT 112:76941

GI For diagram(s), see printed CA Issue.

AB Title per acids I [A = (un)substituted benzene or naphthalene nucleus; R = H, CO<sub>2</sub>H, C(O)OOH, (un)substituted alkyl; n = 1-5] are prepared as bleaching agents. Thus, 44 g 70% H<sub>2</sub>O<sub>2</sub> was added gradually to 55 g phthalimidocacetic acid in 330 g MeSO<sub>3</sub>H at < 15°, and after 1.5 h the mixture was poured into 20% (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> at 5°. Filtration, neutralization to pH 6 by Na<sub>2</sub>CO<sub>3</sub> in aqueous Na<sub>2</sub>SO<sub>4</sub>, refiltration, aqueous washing, and drying in vacuo at room temperature gave 58 g (97%) of substantially pure phthalimidoperacetic acid

(II). In a bleaching test at 200 mg/L initial active O, 1.46 g II gave 83.6% bleaching of standard stained cotton, vs. only 75.1% by 1.86 g H-48 (Mg monoperphthalate).

=> log y  
COST IN U.S. DOLLARS

SINCE FILE  
ENTRY  
39.53

TOTAL  
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995.09

FULL ESTIMATED COST

SINCE FILE  
ENTRY  
-2.34

TOTAL  
SESSION  
-10.14

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

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